

Job Projections for Montana's Industries and Occupations, 1998 - 2008





Other Sources of Montana Labor Market Information

In Publications:

The following publications are available, at no charge, from the Department of Labor and Industry's Research and Analysis Bureau:

Census of Fatal Occupational Injuries—Includes information on work-related fatalities in Montana and the U.S.

County labor market information fliers—Provide information on largest private employers, employment by industry, employment and unemployment statistics, population, per capita income, local information resources, etc. for Montana counties with larger populations.

Job Projections for Montana's Industries and Occupations—Presents information developed to help people anticipate which industries and occupations are likely to show job growth in the near future, and which are not.

Montana Employment and Labor Force Trends—Presents information on statewide and county labor market information. Information is also included on employment by industry, female employment by industry, average hours and earnings, tally of new business firms, and prevailing wage rates for alien certification.

Montana labor market information flier—Statewide labor market information on largest private employers, employment by industry, employment and unemployment statistics, population, per capita income, etc.

Montana Occupational Injuries and Illnesses—Includes information on work-related injuries and illnesses, including accident rates and frequencies by industry.

Profile of the Montana Worker—A publication of charts and graphs providing a comprehensive profile of Montana and its labor force.

Statistics in Brief—Single page reference which includes data on employment and unemployment by county, labor force and service delivery areas.

Wage information publications—Include informational wage rates by occupation.

On the Internet:

The Department of Labor and Industry's Research and Analysis Bureau places much of its labor market information on the Internet at <http://rad.dli.state.mt.us/> . Listings of job openings and State of Montana job vacancies can be found at the State Job Service's self directed job search system address on the Internet at <http://jsd.dli.state.mt.us/> . In addition, Montana job openings are published on America's Job Bank on the Internet World Wide Web Network. Members of the public interested in using the Internet can contact their public libraries, colleges and universities to see if they have Internet access or to find out if there's a commercial service provider in their communities to subscribe and use Internet on a personal computer.

Job Projections for Montana's Industries and Occupations 1998 – 2008

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Research & Analysis Bureau

Job Service Division

Montana Department of Labor & Industry

**State of Montana
Judy Martz, Governor**

**Montana Department of Labor & Industry
Mike Foster, Commissioner**

For more information, contact:

Research and Analysis Bureau

840 Helena Ave

P.O. Box 1728

Helena MT 59624

<http://rad.dli.state.mt.us/>

406-444-2430 / FAX 406-444-2638

Toll free within Montana 800-633-0229

Toll free outside Montana 800-541-3904

TDD 406-444-0532

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The following Research and Analysis staff members worked together producing this publication:

Chief Economist Phil Brooks prepared the Montana industry projections with the assistance of Statistician Bob Liffing—and also wrote the projections narrative for Montana’s industries. Research Specialist Kate Kahle collected and prepared data used in the occupational projections. Research Specialist Roy Hinman prepared the occupational projections with the assistance of Phil Brooks. Julie Huntington edited the publication.

Table of Contents

INTRODUCTION	1
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MONTANA JOB PROJECTIONS, 1998-2008

Job Projections Narrative for Montana's Industries, 1998-2008	2
Montana Job Projections by Industry Sector and Subsector	6
Job Projections Narrative for Montana's Occupations, 1998-2008.....	17
Montana Job Projections Ranked Alphabetically by Occupation	20

UNITED STATES PROJECTIONS

Job Projections Narrative for U.S. Industries, 1998-2008	38
U.S. Job Projections by Industry Sector	39
Job Projections Narrative for U.S. Occupations, 1998-2008	40

METHODOLOGY and OCCUPATIONAL DESCRIPTIONS

Methodology Used in Making Montana Industry Job Projections	44
Methodology Factors by Montana Industry Sector and Subsector	46
Methodology Used in Making Montana Occupational Job Projections	53
Occupational Codes, Titles and Descriptions	54



Introduction

The Need for Job Trend Information

Access to the latest job trend information is crucial to everyone involved in Montana's employment picture. To meet that need, the Department of Labor and Industry's Research and Analysis Bureau develops industry and occupational job projections to help people anticipate which industries and occupations may show job growth in the near future, and which are not. Businesses, government agencies, educators, researchers, job training program planners, students and job seekers should all benefit.

1998—2008 Montana Job Projections

The industry and occupational job projections for Montana featured in this publication were made to the year 2008 based on data from 1998 and previous years, using methodology detailed on pages 44-53. Resulting job numbers are estimated numbers, subject to error, and all information applies to the state as a whole. Projections were made partly under the assumption that past employment trends will continue, that relationships with other factors such as population will continue, and that our economy's institutional framework will not undergo radical changes.

Comparable National Information

Some information on national industry and occupational job projections for 1998-2008 is incorporated in this publication beginning on page 38 so people can see how Montana's job projections compare with national projections made for the same time period. People interested in seeing more detailed information on national projections should consult the November 1999 issue of the *Monthly Labor Review*, published by the U.S. Department of Labor's Bureau of Labor Statistics or visit the bureau's Internet website at <http://stats.bls.gov/>.

For More Information

If you have questions about information included in this publication, please contact us at the Research and Analysis Bureau, Job Service Division, Montana Department of Labor and Industry, P.O. Box 1728, Helena, MT 59624, (406) 444-2430 or TDD (406) 444-0532.

Contents of this publication and additional projections information can be found on the Research and Analysis Bureau website at <http://rad.dli.state.mt.us/>.

Job Projections for Montana's Industries, 1998-2008

Although the future is never certain, it is useful to look ahead and try to determine what generally may happen in terms of the number of jobs supported within Montana's economic sectors. Most job growth involves wage and salary (payroll) jobs; consequently, wage and salary jobs will be emphasized in this narrative.

Because of the inherent uncertainty in predicting the future, all of the projections presented here should be interpreted as only a general approximation of the true level of jobs overall or for a given industry.

About 8,200 Additional Jobs a Year Projected through 2008

Roughly 82,000 net additional jobs (difference between jobs created and jobs lost) are projected for Montana between 1998 and 2008—64,000 of which are estimated to be wage and salary jobs, and 18,000 of which are projected to be self-employment jobs. This translates to about 8,200 net Montana jobs per year consisting of both wage and salary jobs (1.6 percent per year) and self-employment jobs (1.2 percent per year). Self-employment jobs are forecast to have a lower growth rate because many of these jobs are in production agriculture, which is projected to decline slightly.

Most Job Growth in Service-Producing Sectors

Most job growth (about 59,000 net payroll jobs) is projected to be in the services-producing segment of the Montana economy (the service sector), which contains industries that do not produce a physical product. Much of this growth is projected to be in eating and drinking establishments, gambling and other recreation establishments, personnel supply services, gasoline service stations, telemarketing, public postsecondary education, noneducation local government, computer services, nursing homes, doctors' offices, private hospitals, residential building contractors, hotels/motels, trucking, and research/testing services. Together, these 15 sectors account for 54 percent of projected service sector payroll job growth, and represent a mixture of low- and high-paying jobs.

Job Growth in Goods-Producing Sectors Much Smaller

Overall job growth forecast for the goods-producing segment of the Montana economy through 2008 is much more modest than for service-type sectors. Wage and salary jobs are projected to continue to decline in production agriculture. Forecast job growth for mining is very modest (0.4 percent per year), with some subsectors declining (gold, copper, crude oil and gas production, coal), counterbalanced by increasing jobs for palladium/platinum and oil/gas field services segments. Construction payroll jobs are forecast to continue to grow, particularly for building construction and associated special trades construction jobs. (Building construction is driven by population growth.) Manufacturing is estimated to be basically stagnant in job growth, similar to the U.S. manufacturing sector. *Please refer to the table on pages 6-16 for more detailed projections for broadly defined industries, as well as for about 350 specific industries.*

Services Jobs

Narrowly defined, services (*referenced as "other private services" in the table beginning on page 6*) is a major part of the broader service-producing segment of the Montana economy. It is projected to increase by about 32,000 net wage and salary jobs between 1998 and 2008. This increase accounts for half the additional Montana payroll jobs for this time period. (*Information in the table on pages 6-16 details the variety of consumer, producer and professional services included in this category.*)

Within the services sector, private health services is expected to increase by about 8,000 payroll jobs—or an annual growth rate of 2.3 percent—which is similar to the national growth rate for this sector. Most of the job growth is forecast in the nursing home, hospital, and doctor's office segments of health services. Health services payroll jobs paid an average of \$27,400 in 1998, well above the statewide average of \$22,500. Within health services, annual pay ranged from \$12,000 for home health care services to \$46,000 for an average job in a doctor's office.

Business services is projected to increase by roughly 7,500 wage and salary jobs between 1998 and 2008. Major components of this subsector include temporary help agencies that supply workers to various industries, telemarketing, computer services, and building maintenance services. Growth in this industry is part of a national trend. **Computer services** is forecast to be the component with the highest growth rate—with **building maintenance** and **credit services** as segments with the lowest growth rates. Average wages in 1998 ranged from about \$31,000 for computer services to roughly \$9,000 for building maintenance, reflecting differences in skill levels. Overall, 1998 wages in business services averaged \$15,800, well below average for Montana.

Pieces of the low-paying **recreation and travel** industry are located within the narrowly-defined services category—namely **hotels and other lodging places**, and **amusement and recreational services**. This latter subsector is projected to increase by approximately 4,000 payroll jobs between 1998 and 2008. Nearly all the forecast growth is in the **other recreation services** category, which consists principally of gambling establishments, ski areas, outfitters and the like. Average 1998 wages for this recreational services category were about \$11,000. **Hotels and other lodging places** is projected to increase by about 1,600 payroll jobs, with 1998 average annual wages being similar to those within other recreation services.

Private social services is projected to increase by about 3,700 payroll jobs over the period, or an average of 370 jobs per year. This is partly the result of the national trend toward shifting counseling and residential treatment programs away from situations where medical doctors are involved. Social services include nonmedical individual and family social services, nonmedical residential care, and child day care services, along with job training and vocational rehabilitation services. Wages for 1998 in this subsector averaged \$13,700.

The narrowly-defined services category also includes the **engineering and management services** subsector, which is projected to increase by

roughly 3,400 payroll jobs through 2008. This subsector is the second highest-paying segment of narrowly-defined services. **Legal services** paid the highest, with \$36,000 average pay for 1998. **Engineering and management services** paid \$33,100 on average. The largest growth in job numbers is forecast for the **research/testing** and **management services** segments.

Retail Trade Jobs

Retail trade (a portion of the service-producing sector) is projected to add about 13,000 payroll jobs to Montana's economy between 1998 and 2008, accounting for about 20 percent of total additional Montana payroll jobs. Retail trade is a low-paying segment of the Montana and national economies.

About one-third of the retail payroll job increase—about 4,500 jobs total or 450 jobs per year—is projected to be in **eating and drinking places** (fast-food outlets, restaurants and bars). Average 1998 wages in this subsector were very low at \$8,600.

The **motor vehicle dealers, parts, and service stations** retail trade subsector is projected to increase by roughly 3,400 wage and salary jobs. Two-thirds of the increase is projected for the **gasoline service stations** component of this subsector, with average 1998 wages of \$12,600. A major portion of the gasoline service stations and eating/drinking places subsectors serves out-of-state travelers.

Other retail stores (e.g., sporting goods, drugstores and gift shops) serves both Montana residents and travelers to the state. The projected 1998 to 2008 payroll job increase for this retail subsector is about 1,400 jobs. Jobs in independent **drugstores** are forecast to decline, presumably as a result of competition from large general retailers with prescription drug departments. Average 1998 wages for other retail trade were \$13,900.

Wage and salary jobs in **general merchandise stores**, both discount and nondiscount, are projected to increase by about 1,300 over the 1998 to 2008 time period. 1998 annual wages were \$14,300.

Retail building materials stores are forecast to add 1,200 payroll jobs over the period, largely as the result of projected building construction activity. 1998 average annual wages were \$20,500. This is a higher-wage component of retail trade, but wages are still below the Montana average.

Other components of retail trade—home furnishings stores and retail food stores—are projected to have smaller job increases.

Strictly apparel stores are projected to decrease in payroll employment.

Construction Jobs

Most of the growth in goods-producing industries is projected to be in the construction sector, which is forecast to grow by 4,800 jobs between 1998 and 2008. Within construction, the growth area is in both general building contractors and special trade contractors (e.g., plumbing, heating and electrical) subsectors. Heavy construction is projected to increase slightly over the 1998 to 2008 time period, assuming that recent federal highway funding is not extended beyond its legislated 6-year time horizon. Also, this latter sector is tied to a smaller number of specific large projects, such as pipelines, as compared with building construction. This characteristic of heavy construction leads to volatile employment levels.

Construction is a higher annual wage sector, with 1998 average Montana wages of \$28,000. Heavy construction is the highest wage component, \$34,700 for 1998. General building contractors and special trade contractors are at about the same level, with 1998 annual wages of \$26,000 and \$26,400, respectively.

Finance, Insurance and Real Estate Jobs

Finance, insurance, and real estate services combined are forecast to grow by about 3,700 payroll jobs. Finance is projected to grow by 1,700 jobs, mostly in the banking segment of the industry. Finance also includes securities brokers and services, the highest-paying segment of the Montana economy, paying \$68,400 on average in 1998. Average pay for banking was more modest at \$27,000. Primarily driven by population change, the real estate subsector should show an increase of about 1,000

wage and salary jobs. This is a lower-paying sector at \$17,600 for 1998. The insurance carriers segment is projected to increase by 600 jobs, partly because of the planned expansion of National Electronics Warranty Corporation's customer service operation in Great Falls. According to newspaper accounts, these customer service jobs are lower-paying jobs. The insurance agents and services subsector is projected to grow modestly.

Transportation, Communications and Utilities Jobs

Transportation, communications and utilities services together are projected to increase by about 2,700 payroll jobs. The railroad; electric, gas, and sanitary services; and small pipeline subsectors are all projected to have employment declines—which is also true nationally. Jobs in arrangement of passenger transportation (mostly travel agencies) and local transportation (includes school bus contractors) subsectors are projected to be essentially flat. Travel agencies are experiencing heavy competition from Internet sales. Some of the projected decline in railroad transportation and pipeline jobs is due to restructuring and substituting capital equipment for labor. Electric services is projected to decline as the result of competition being introduced into the industry. 1998 annual wages were about \$41,000 for electric services, \$55,000 for railroads and \$54,500 for the small pipelines subsector—all high-paying segments of the Montana economy.

The rest of this portion of the Montana economy is projected to have increased employment, led by the trucking and warehousing subsector with a projected increase of 1,500 wage and salary jobs. The communications subsector will increase in employment as the result of national trends. It remains to be seen if the telephone communications increase, which is most of this subsector's increase, will be in customer service jobs or in more highly paid jobs.

Wholesale Trade Jobs

Wholesale trade, which primarily provides services to businesses, is projected to increase by about 2,500 payroll jobs between 1998 and 2008.

More growth is anticipated for the more highly paid durable goods component (\$29,700 in 1998) of wholesale trade, than the nondurable segment (\$26,100).

Government Jobs

Between 1998 and 2008, government employment is projected to grow at about two-fifths the annual rate for the economy as a whole (0.6 percent vs. 1.5 percent) for a total of 5,100 jobs.

Three detailed components of the government (public services) sector are projected to decline: federal jobs, except postal workers; jobs at the Warm Springs State Hospital; and local government hospitals.

The federal job decline is part of a national trend. 1998 average wage per federal job was high at \$38,500.

The newly completed state hospital facility requires fewer workers because of fewer patients, resulting in part because of the movement toward community-based treatment. State hospital jobs paid an average of \$25,300 in 1998.

Jobs for local government hospitals are forecast to decline only slightly.

Much of the government sector job growth will be in the state postsecondary component of public education. Adult population growth and research contracts are driving employment increases in this segment of public education. A total increase of roughly 2,100 jobs is projected for the 1998 to 2008 time period in the state education sector, where 1998 wages averaged about \$26,000.

Other local government (excluding education) jobs are projected to increase by about 1,900 through 2008 in response to population growth. This is a lower than average wage segment of the Montana economy, with 1998 annual wages at about \$21,000.

Additional modest growth is projected for local education (0.4 percent or 120 jobs per year). These jobs averaged \$23,500 for 1998—\$1,000 above the state economy average.

Other state government (noneducation) is projected to increase by roughly 600 jobs over the period 1998 to 2008, an annual growth rate of 0.5 percent.

Manufacturing Jobs

Manufacturing is projected to increase by roughly 800 payroll jobs in spite of forecast declines in the sporting goods fabrication, primary

aluminum and lead processing, and wood products industries of about 1,000 jobs, combined. Projected increases in other segments of manufacturing overcome this deficit. The largest increases are projected for industrial machinery, printing and publishing, furniture, and fabricated textiles.

Mining Jobs

The mining sector—which includes energy minerals, metals, and nonmetallic minerals—is projected to increase slightly by about 200 jobs between 1998 and 2008. This stagnation is caused in part by projected declines in most segments of the industry, except for a portion of metal mining and the oil and gas services subsector. Employment growth for nonmetallic, nonenergy minerals such as sand/gravel and talc is basically flat. The metal mining subsector is projected to increase because of the opening of a new platinum/palladium mine in Sweet Grass County. Work on constructing the mine began in 1998. The operating workforce for this mine more than counterbalances the anticipated closure of the Golden Sunlight gold mine in Jefferson County.

Agriculture, Forestry, Hunting and Trapping Jobs

The agriculture, forestry and hunting segment of the goods-producing portion of the Montana economy has been—and still is—dominated by production agriculture, the raising of crops and livestock. Production agriculture has experienced employment declines in both payroll and self-employment jobs for many decades. Projected to continue, this decline is caused partly by the substitution of machinery and equipment (tractors, etc.) for labor. A decrease of 2,100 agricultural wage and salary (mostly hired hands) jobs is projected for the 1998-2008 period. On the other hand, agricultural services, which includes landscape and veterinary services used by private households, is projected to increase in keeping with projected population increases.

Specific Job Projections

Specific job projections for industry sectors and subsectors are included in the table found on the following 11 pages.

The methodology used in making the projections is explained beginning on page 44.

MONTANA JOBS BY INDUSTRY

1988, 1998, and Projected 2008

INDUSTRY	SIC*	1988 Annual Average Jobs	1998 Annual Average Jobs	Projected 2008 Jobs	Average Change 1998 to 2008	Montana Annual Growth Rate 1998-2008	U.S. Annual Growth Rate 1998-2008
WAGE AND SALARY (PAYROLL) JOBS:							
AGRICULTURE, FORESTRY & HUNTING							
PRODUCTION AGRICULTURE	01 & 02	9,554	8,455	6,913	(154)	-2.0%	N/A
Agricultural Production, Crops & Livestock	01 & 02	8,330	6,430	4,332	(210)	-3.9%	N/A
VETERINARY & OTHER AGRICULTURAL SERVICES	07	991	1,762	2,322	56	2.8%	2.2%
Soil Preparation Services	071	0	0	3	0	0	2.0%
Crop Services	072	120	107	114	1	0.6%	0.6%
Veterinary Services (includes both small & large animal)	074	429	826	1,110	28	3.0%	2.7%
Kennels & Other Animal Services, except Veterinary	075	125	150	201	5	3.0%	1.1%
Farm Labor & Management Services	076	0	0	0	0	0	1.6%
Landscape & Horticultural Services	078	286	676	894	22	2.8%	2.6%
TIMBER TRACTS, NURSERIES & FORESTRY SERVICES	08	0	238	201	(4)	-1.7%	-2.3%
Timber Tracts	081	141	0	90	0	0	0
Forest Nurseries & Gathering	083	0	0	31	0	0	N/A
Forestry Services	085	92	100	80	(2)	-2.2%	N/A
FISHING, HUNTING, TRAPPING, GAME PROPAGATION	09	0	25	58	3	8.8%	N/A
Hunting, Trapping & Game Propagation	097	0	25	58	3	8.8%	N/A
MINING							
METAL MINING	10	6,263	5,163	5,382	22	0.4%	-2.1%
Iron Ores	101	2,130	1,829	1,992	18	0.9%	-3.0%
Copper Ores	102	0	0	81	0	0	-2.1%
Lead & Zinc Ores	103	0	0	1	0	0	0
Gold & Silver Ores	104	1,089	555	236	(32)	-8.2%	-3.6%
Metal Mining Services	108	347	121	71	(5)	-5.2%	-5.2%
Palladium/Platinum & Other Metal Ores	109	0	0	1,600	0	0	-7.2%
COAL MINING	12	1,124	971	827	(14)	-1.6%	-4.2%
Bituminous Coal Mining	122	0	0	719	0	0	-4.2%
Coal Mining Services	124	0	0	108	0	0	-6.7%
OIL AND GAS EXTRACTION	13	1,937	1,564	1,702	14	0.8%	-1.8%
Crude Petroleum & Natural Gas	131	615	517	340	(18)	-4.1%	-6.1%
Oil & Gas Field Services	138	1,322	1,047	1,362	32	2.7%	0.5%
NONENERGY, NONMETAL MINING	14	1,072	799	861	6	0.8%	-1.2%
Dimension Stone	141	0	0	4	0	0	0
Crushed & Broken Stone	142	0	55	51	(0)	-0.8%	-0.7%
Sand & Gravel	144	260	346	368	2	0.6%	-1.1%
Clay, Ceramic & Refractory Minerals	145	0	0	1	0	0	0
Chemical & Fertilizer Mining	147	0	0	16	0	0	0
Nonmetallic Minerals Services	148	77	16	13	(0)	-2.1%	1.1%
Talc & Other Miscellaneous Nonmetallic Mining	149	588	344	408	6	1.7%	-2.4%

*Standard Industrial Classification Code.

N/A=Not Available

0=Not Disclosable, fewer than 3 establishments or 1 establishment with 80% or more of industry's employment, suppressed sector's jobs included in totals.

Sources: Research & Analysis Bureau, Montana Dept. of Labor & Industry, Bureau of Economic Analysis, U.S. Department of Commerce for historical self-employment and production agriculture wage and salary employment data, Bureau of Labor Statistics, U.S. Department of Labor for U.S. growth rates

MONTANA JOBS BY INDUSTRY

1988, 1998, and Projected 2008

INDUSTRY	SIC*	1988 Annual Average Jobs	1998 Annual Average Jobs	Projected 2008 Jobs	Average Change 1998 to 2008	Montana Annual Growth Rate 1998-2008	U.S. Annual Growth Rate 1998-2008
CONSTRUCTION							
GENERAL BUILDING CONSTRUCTION	15	9,014	18,860	23,677	482	2.3%	0.8%
Residential Building Contractors	152	2,468	5,362	7,017	166	2.7%	0.7%
Operative Builders	153	1,576	3,254	4,740	148	3.8%	1.1%
Nonresidential Building Contractors	154	11	24	26	0	0.8%	-0.4%
HEAVY CONSTRUCTION	16	881	2,084	2,251	17	0.8%	0.4%
Highway & Street Contractors	161	2,463	3,784	3,991	21	0.5%	0.5%
Water/Sewer & Other Heavy Construction Contractors	162	1,224	1,535	1,528	(1)	-0.0%	1.0%
SPECIAL TRADES CONSTRUCTION	17	1,239	2,249	2,463	21	0.9%	0.3%
Plumbing, Heating, Air Conditioning Contractors	171	4,083	9,714	12,669	298	2.7%	1.0%
Painting & Paper Hinging Contractors	172	1,009	2,221	2,937	72	2.8%	1.0%
Electrical Contractors	173	184	495	668	17	3.0%	0.9%
Masonry, Stonework & Plastering	174	693	1,830	2,238	41	2.0%	1.2%
Carpentry & Floor Work	175	393	1,000	1,255	28	2.3%	0.9%
Roofing, Siding & Sheet Metal Work	176	120	539	864	33	4.8%	0.9%
Concrete Work	177	356	654	860	21	2.8%	1.2%
Water Well Drilling	178	526	969	1,202	23	2.2%	0.7%
Excavation, Structural Steel Erection & Other Special Trades	179	109	191	256	7	3.0%	1.3%
MANUFACTURING							
FOOD PROCESSING	20	693	1,815	2,389	57	2.8%	1.2%
Meat Products	201	21,512	24,149	24,910	78	0.3%	0.0%
Dairy Products	202	2,740	2,549	2,450	(10)	-0.4%	0.2%
Preserved Fruits & Vegetables	203	249	340	423	8	2.2%	1.4%
Flour, Prepared Feeds & Other Grain Mill Products	204	478	300	190	(11)	-4.5%	-1.2%
Bakery Products	205	59	28	26	(0)	-0.7%	-0.6%
Sugar & Confectionery Products	206	387	399	403	0	0.1%	-0.1%
Fats & Oils	207	0	262	225	(4)	-1.5%	-0.5%
Beverages	208	444	464	313	(15)	-3.9%	-0.4%
Pasta, Manufactured Ice & Other Food Processing	209	0	14	15	0	0.7%	0.6%
TEXTILE MILL PRODUCTS	22	593	560	637	8	1.3%	-1.0%
Broadwoven Fabric Mills, Cotton	221	42	182	218	4	1.8%	1.0%
Broadwoven Fabric Mills, Synthetic	222	0	31	37	1	1.8%	-1.7%
Knitting Mills	225	0	0	3	0	0	0
Textile Finishing, Except Wool	226	0	0	2	0	0	0
Other Textile Goods	229	0	0	16	0	0	0
APPAREL & OTHER FABRICATED TEXTILE PRODUCTS	23	0	0	4	0	0	0
Men's & Boys' Clothing	232	544	507	755	25	4.1%	-2.6%
Women's Outerwear	233	0	14	11	(0)	-2.4%	-4.6%
Women's & Children's Undergarments	234	0	0	8	0	0	0
Hats, Caps & Millinery	235	0	0	2	0	0	0
Girls' & Children's Outerwear	236	0	0	3	0	0	0
Other Fabricated Textile Products	239	0	0	14	0	0	0

*Standard Industrial Classification Code.

N/A=Not Available.

D=Not Disclosable; fewer than 3 establishments or 1 establishment with 80% or more of industry's employment, suppressed sector's jobs included in totals.

Sources: Research & Analysis Bureau, Montana Dept. of Labor & Industry; Bureau of Economic Analysis, U.S. Department of Commerce for historical self-employment and production agriculture wage and salary employment data; Bureau of Labor Statistics, U.S. Department of Labor for U.S. growth rates.

MONTANA JOBS BY INDUSTRY

1988, 1998, and Projected 2008

INDUSTRY	SIC*	1988 Annual Average Jobs	1998 Annual Average Jobs	Projected 2008 Jobs	Average Change 1998 to 2008	Montana Annual Growth Rate 1998-2008	U.S. Annual Growth Rate 1998-2008
LOGGING, LUMBER AND OTHER WOOD PRODUCTS	24	8,223	7,086	6,904	(18)	-0.3%	0.0%
Logging	241	1612	1,234	1,124	(11)	-0.9%	0.3%
Sawmills & Planing Mills	242	4,888	3,236	2,652	(58)	-2.0%	-1.2%
Millwork, Plywood & Structural Members	243	891	1,389	1,452	8	0.4%	0.2%
Wood Containers	244	43	68	110	4	4.9%	1.9%
Logs Homes & Other Prefabricated Wood Buildings	245	247	511	682	17	2.9%	0.6%
Posts/Poles, Reconstituted & Other Wood Products	249	544	648	884	24	3.2%	-0.9%
FURNITURE MANUFACTURING	25	244	492	768	28	4.6%	0.3%
Household Furniture Manufacturing	251	87	241	387	15	4.9%	-0.6%
Office Furniture	252	0	133	221	9	5.2%	-0.7%
Public Building & Related Furniture	253	0	0	25	0	0	3.2%
Partitions & Fixtures	254	59	90	134	4	4.1%	1.6%
Other Furniture	259	0	0	1	0	0	0
PAPER PRODUCTS	26	834	779	741	(4)	-0.5%	0.0%
Paperboard Mills	263	0	0	646	0	0	-1.1%
Paperboard Containers	265	0	0	15	0	0	0
Other Converted Paper Products	267	0	0	80	0	0	0.4%
PRINTING AND PUBLISHING	27	2,516	3,103	3,421	32	1.0%	-0.1%
Newspapers	271	1,545	1,883	2,018	14	0.7%	-1.0%
Periodicals	272	89	58	63	0	0.8%	0.8%
Books	273	34	96	107	1	1.1%	0.9%
Directories & Other Publishing	274	54	243	404	18	5.2%	0.7%
Commercial Printing	275	674	807	825	2	0.2%	0.2%
Checkbooks, Other Blankbooks & Bookbinding	278	0	0	4	0	0	0
Printing Trade Services	279	0	0	0	0	0	0
CHEMICALS	28	598	686	846	18	2.1%	0.0%
Industrial Inorganic Chemicals	281	296	181	171	(1)	-0.6%	-1.3%
Plastics Materials & Synthetic Resins	282	0	0	1	0	0	0
Drugs	283	0	138	165	3	1.8%	1.0%
Soap, Cleaners & Toilet Preparations	284	7	15	12	(0)	-2.2%	0.6%
Paints & Allied Products	285	0	0	12	0	0	-1.6%
Silicones & Other Industrial Organic Chemicals	286	0	0	300	0	0	-0.2%
Agricultural Chemicals	287	154	119	156	4	2.7%	-0.6%
Other Chemicals	289	13	28	29	0	0.4%	0.4%
PETROLEUM PRODUCTS	29	875	951	816	(14)	-1.6%	-1.8%
Petroleum Refining	291	0	0	807	0	0	-2.5%
Asphalt Paving & Roofing Materials	295	0	0	9	0	0	0
RUBBER & PLASTIC PRODUCTS	30	116	391	521	13	2.9%	1.1%
Rubber & Plastic Footwear	302	0	0	0	0	0	-6.0%
Hose, Belting, Gaskets	305	0	0	37	0	0	0
Other Fabricated Rubber Products	306	0	156	241	9	4.4%	0.8%
Miscellaneous Plastic Products	308	116	199	243	4	2.0%	1.6%

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Sources: Research & Analysis Bureau, Montana Dept. of Labor & Industry, Bureau of Economic Analysis, U.S. Department of Commerce for historical self-employment and production agriculture wage and salary employment data, Bureau of Labor Statistics, U.S. Department of Labor for U.S. growth rates

MONTANA JOBS BY INDUSTRY

1988, 1998, and Projected 2008

INDUSTRY	SIC*	1988 Annual Average Jobs	1998 Annual Average Jobs	Projected 2008 Jobs	Average Change 1998 to 2008	Montana Annual Growth Rate 1998-2008	U.S. Annual Growth Rate 1998-2008
LEATHER PRODUCTS	31	52	88	87	(0)	-0.1%	-3.3%
Leather Tanning & Finishing	311	D	D	5	D	D	D
Footwear, except Rubber	314	D	D	3	D	D	D
Other Leather Goods	319	25	78	79	0	0.1%	0.1%
STONE, CLAY & GLASS PRODUCTS	32	862	1,004	1,072	7	0.7%	-0.6%
Products of Purchased Glass	323	D	D	8	D	D	D
Hydraulic Cement	324	D	D	190	D	D	-2.3%
Structural Clay Products	325	D	D	2	D	D	D
Pottery Products	326	6	D	4	D	D	D
Concrete & Concrete Products	327	624	768	841	7	0.9%	0.0%
Cut Stone & Stone Products	328	9	21	22	0	0.5%	0.5%
Miscellaneous Nonmetallic Mineral Products	329	29	D	5	D	D	D
PRIMARY METALS INDUSTRIES	33	1,158	1,049	665	(38)	-4.5%	-1.0%
Iron & Steel Foundries	332	D	D	33	D	D	D
Primary Aluminum & Lead Processing	333	1,062	887	455	(43)	-6.5%	-2.1%
Nonferrous Foundries	336	56	115	161	5	3.4%	0.6%
Other Primary Metal Products	339	D	D	16	D	D	D
FABRICATED METAL PRODUCTS	34	499	740	884	14	1.8%	0.1%
Cutlery, Handtools & Hardware	342	47	92	142	5	4.4%	-1.5%
Plumbing & Heating Metal Products, except Electric	343	D	D	3	D	D	D
Fabricated Structural Metal Products	344	339	510	559	5	0.9%	0.8%
Screw Machine Products	345	0	D	2	D	D	D
Metal Forgings & Stampings	346	D	26	25	(0)	-0.4%	-0.3%
Metal Services (Not Elsewhere Classified)	347	23	22	25	0	1.3%	1.3%
Small Arms & Other Ordnance and Accessories	348	D	78	121	4	4.6%	-1.8%
Miscellaneous Fabricated Metal Products	349	23	7	7	0	0.0%	0.3%
INDUSTRIAL MACHINERY	35	571	1,878	2,400	52	2.5%	0.0%
Farm & Garden Machinery	352	46	29	27	(0)	-0.7%	-0.9%
Construction, Mining, and Related Machinery	353	76	87	116	3	2.9%	0.6%
Machine Tool Accessories & Other Metalworking Machinery	354	D	D	679	D	D	D
Special Industry Machinery	355	D	D	1,127	D	D	0.4%
General Industrial Machinery	356	D	79	79	0	0.0%	0.1%
Computer & Office Equipment	357	D	23	22	(0)	-0.4%	-0.3%
Refrigeration & Service Industry Machinery	358	D	9	10	0	1.1%	0.8%
Machine Shops & Other Industrial Machinery	359	92	300	340	4	1.3%	0.3%
ELECTRONIC & OTHER ELECTRICAL EQUIPMENT	36	245	417	418	0	0.0%	0.4%
Electric Distribution Equipment	361	D	D	0	D	D	-1.7%
Electrical Industrial Apparatus	362	D	0	0	0	0.0%	-2.3%
Household Appliances	363	D	D	2	D	D	D
Electric Lighting & Wiring Equipment	364	12	13	14	0	0.7%	-1.5%
Communications Equipment	366	D	18	19	0	0.5%	0.7%
Electronic Components	367	199	206	324	12	4.6%	2.2%
Other Electrical Equipment	369	0	62	59	(0)	-0.5%	-0.5%

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MONTANA JOBS BY INDUSTRY

1988, 1998, and Projected 2008

INDUSTRY	SIC*	1988 Annual Average Jobs	1998 Annual Average Jobs	Projected 2008 Jobs	Average Change 1998 to 2008	Montana Annual Growth Rate 1998-2008	U.S. Annual Growth Rate 1998-2008
TRANSPORTATION EQUIPMENT	37	279	564	587	2	0.4%	0.5%
Motor Vehicles & Equipment	371	148	235	274	4	1.5%	-0.6%
Aircraft & Parts	372	44	50	63	1	2.3%	2.3%
Boat Building & Repairing	373	D	D	1	D	D	D
Railroad Equipment	374	0	D	214	D	D	D
Motorcycles, Bicycles & Parts	375	D	D	13	D	D	D
Campers & Other Transportation Equipment	378	85	D	22	D	D	3.0%
MEASURING, CONTROLLING & MEDICAL INSTRUMENTS	38	165	371	505	13	3.1%	0.2%
Search & Navigation Equipment	381	0	D	34	D	D	D
Measuring & Controlling Instruments	382	D	165	273	11	5.2%	-0.1%
Dental & Other Medical Instruments	384	125	159	190	3	1.8%	1.8%
Photographic Equipment & Supplies	386	D	D	8	D	D	D
SPORTING GOODS, GAMES, JEWELRY, & OTHER MANUFACTURING	39	991	1,463	1,033	(43)	-3.4%	-0.3%
Jewelry, Silverware & Plated Ware	391	D	D	289	D	D	-1.8%
Musical Instruments	393	D	D	129	D	D	D
Sporting Goods, Games & Toys	394	376	752	272	(48)	-9.7%	-1.1%
Pens, Pencils & Other Artists' Materials	395	D	25	26	0	0.4%	0.4%
Costume Jewelry & Novelties	396	D	D	7	D	D	D
Signs & Other Manufacturing	399	290	300	310	1	0.3%	0.7%
TRANSPORTATION & UTILITIES		19,690	21,733	24,442	271	1.2%	1.3%
RAILROADS	40	3,328	3,116	2,645	(47)	-1.6%	-2.2%
Railroads	401	3,328	3,116	2,645	(47)	-1.6%	-2.2%
LOCAL TRANSPORTATION	41	1,103	1,542	1,532	(1)	-0.1%	2.9%
Ambulance & Other Local & Suburban Private Transit	411	197	344	484	14	3.5%	3.8%
Taxicabs	412	137	161	149	(1)	-0.8%	1.1%
Intercity & Rural Bus Transportation	413	129	D	84	D	D	-2.2%
Bus Charter Service	414	D	51	59	1	1.5%	1.5%
School Buses	415	588	795	751	(4)	-0.6%	2.8%
Bus Terminal Services	417	D	D	5	D	D	D
MOTOR FREIGHT TRANSPORTATION	42	4,811	5,827	7,278	145	2.2%	1.1%
Trucking	421	4,750	5,740	7,161	142	2.2%	1.0%
Public Warehousing & Storage	422	61	87	117	3	3.0%	1.9%
WATER TRANSPORTATION	44	15	47	48	0	0.2%	0.5%
Water Passenger Transportation	448	10	19	19	0	0.0%	0.0%
Marinas & Other Water Transportation Services	449	5	28	29	0	0.4%	0.3%
AIR TRANSPORTATION	45	1,800	2,331	2,711	38	1.5%	1.7%
Air Transportation, Scheduled & Air Courier	451	1,500	1,784	2,025	24	1.3%	1.5%
Air Transportation, Nonscheduled	452	100	249	298	5	1.8%	4.7%
Airports & Flying Fields	458	200	298	388	9	2.7%	1.8%
PIPELINES, EXCEPT NATURAL GAS	46	78	117	28	(9)	-13.3%	-1.0%
Pipelines, Except Natural Gas	461	78	117	28	(9)	-13.3%	-1.0%

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MONTANA JOBS BY INDUSTRY

1988, 1998, and Projected 2008

INDUSTRY	SIC*	1988 Annual Average Jobs	1998 Annual Average Jobs	Projected 2008 Jobs	Average Change 1998 to 2008	Montana Annual Growth Rate 1998-2008	U.S. Annual Growth Rate 1998-2008
TRANSPORTATION SERVICES	47	525	1,040	1,352	31	2.7%	2.7%
Arrangement of Passenger Transportation	472	410	490	480	(1)	-0.2%	2.0%
Freight Transportation Arrangement	473	106	345	528	18	4.3%	3.3%
Other Transportation Services	478	9	205	344	14	5.3%	3.9%
COMMUNICATIONS	48	3,516	3,913	5,401	149	3.3%	1.9%
Telephone Communication	481	2,030	2,005	3,123	112	4.5%	2.1%
Telegraph & Other Message Communication	482	D	D	200	D	D	-2.2%
Radio & Television Broadcasting	483	1,210	1,299	1,361	6	0.5%	0.2%
Cable & Other Pay Television Services	484	275	534	713	18	2.8%	2.4%
Other Communications Services	489	D	D	4	D	D	D
ELECTRIC, GAS & SANITARY SERVICES	49	4,516	3,800	3,447	(36)	-1.0%	-0.4%
Electric Services	491	662	817	693	(12)	-1.6%	-1.6%
Gas Production & Distribution	492	279	363	374	1	0.3%	-1.5%
Combination Gas & Electric Utility Services	493	D	D	1,602	D	D	-1.9%
Water Supply	494	121	138	160	2	1.5%	1.5%
Sanitary Services	495	303	397	544	15	3.2%	3.3%
Private Irrigation Systems	497	D	D	74	D	D	-2.8%
WHOLESALE TRADE		14,733	18,779	21,301	252	1.3%	0.7%
WHOLESALE TRADE, DURABLE GOODS	50	7,674	9,993	11,824	183	1.7%	0.6%
Wholesale Motor Vehicles, Parts & Supplies	501	1,676	1,937	2,491	55	2.5%	0.4%
Wholesale Furniture & Home Furnishings	502	153	172	193	2	1.2%	0.2%
Wholesale Lumber & Other Construction Materials	503	540	891	992	10	1.1%	0.9%
Wholesale Professional & Commercial Equipment & Supplies	504	730	1,178	1,517	34	2.6%	1.1%
Wholesale Metals & Minerals, Except Petroleum	505	400	437	468	3	0.7%	0.2%
Wholesale Electrical Goods	506	482	832	990	16	1.8%	0.3%
Wholesale Hardware, Plumbing & Heating Equipment	507	521	805	912	11	1.3%	0.3%
Wholesale Machinery, Equipment & Supplies	508	2,479	3,139	3,496	36	1.1%	0.3%
Other Wholesale Durable Goods	509	693	602	765	16	2.4%	0.9%
WHOLESALE TRADE, NONDURABLE GOODS	51	7,059	8,786	9,477	69	0.8%	0.9%
Wholesale Paper & Paper Products	511	291	686	895	21	2.7%	1.7%
Wholesale Drugs & Proprietarys	512	187	289	358	7	2.2%	2.2%
Wholesale Apparel	513	18	186	232	5	2.2%	0.9%
Distribution of Groceries & Related Products	514	2,181	2,670	2,884	21	0.8%	0.6%
Wholesale Grain, Livestock & Other Farm Products	515	1,127	949	501	(45)	-8.2%	-2.5%
Wholesale Chemicals & Related Products	516	285	269	294	3	0.9%	1.5%
Petroleum & Petroleum Products Distribution	517	1,165	1,035	1,033	(0)	-0.0%	0.0%
Beer, Wine & Distilled Beverages Distribution	518	587	711	642	(7)	-1.0%	-0.2%
Other Wholesale Trade—Nondurable Goods	519	1,218	1,991	2,638	65	2.9%	1.4%

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MONTANA JOBS BY INDUSTRY

1988, 1998, and Projected 2008

INDUSTRY	SIC*	1988 Annual Average Jobs	1998 Annual Average Jobs	Projected 2008 Jobs	Average Change 1998 to 2008	Montana Annual Growth Rate 1998-2008	U.S. Annual Growth Rate 1998-2008
RETAIL TRADE		59,538	81,347	94,153	1,281	1.5%	1.3%
BUILDING MATERIALS & MOBILE HOME DEALERS	52	2,751	4,423	5,595	117	2.4%	1.4%
Lumber & Other Building Supplies	521	1,138	2,030	2,596	57	2.5%	1.5%
Paint, Glass & Wallpaper Stores	523	232	414	527	11	2.4%	0.1%
Hardware Stores	525	1,113	1,395	1,723	33	2.1%	0.7%
Retail Nurseries & Garden Stores	526	99	234	325	9	3.3%	1.9%
Mobile Home Dealers	527	169	350	424	7	1.9%	3.6%
GENERAL MERCHANDISE STORES	53	6,314	8,565	9,930	128	1.4%	0.9%
Department Stores (Includes Discount Department Stores)	531	4,322	7,418	8,652	124	1.6%	1.1%
Variety Stores	533	738	355	325	(3)	-0.9%	-3.7%
Smaller Department Stores & Other General Merchandise Stores	539	1,254	892	942	5	0.5%	0.5%
FOOD STORES	54	8,835	11,175	11,714	54	0.5%	0.7%
Grocery Stores	541	8,210	10,084	10,331	25	0.2%	0.6%
Meat & Fish Markets	542	145	91	99	1	0.8%	0.6%
Fruit & Vegetable Markets	543	8	14	17	0	1.8%	1.8%
Candy, Nut & Confectionary Stores	544	53	71	75	1	0.7%	0.7%
Retail Bakeries	546	320	575	681	11	1.7%	1.8%
Health & Other Miscellaneous Food Stores	549	99	340	510	17	4.1%	3.7%
MOTOR VEHICLE DEALERS & SERVICE STATIONS	55	8,034	11,858	15,257	340	2.6%	1.1%
New & Used Motor Vehicle Dealers	551	3,257	3,713	4,191	48	1.2%	0.8%
Exclusively Used Motor Vehicle Dealers	552	141	482	592	11	2.1%	3.8%
Auto Parts & Home Supply Stores	553	1,078	1,833	2,157	32	1.6%	1.7%
Gasoline Service Stations	554	3,218	5,192	7,421	223	3.6%	0.6%
Boat Dealers	555	95	148	193	5	2.7%	0.9%
Recreational Vehicle Dealers	556	115	244	381	14	4.6%	2.9%
Motorcycle Dealers	557	114	186	220	3	1.7%	2.6%
Snowmobile & Other Motor Vehicle Dealers	559	14	60	102	4	5.4%	0.3%
RETAIL APPAREL STORES	56	2,300	2,283	1,993	(29)	-1.3%	-0.2%
Men's and Boys' Clothing Stores	561	207	122	35	(9)	-11.5%	-2.7%
Women's Clothing Stores	562	769	390	149	(24)	-9.2%	-4.0%
Women's Accessory & Specialty Stores	563	129	107	127	2	1.7%	1.5%
Children's and Infants' Clothing	564	58	75	89	1	1.6%	1.6%
Family Clothing Stores	565	535	901	968	7	0.7%	1.3%
Shoe Stores	566	449	520	373	(15)	-3.3%	-0.4%
Other Apparel Stores	569	153	167	251	8	4.2%	2.8%
HOME FURNISHINGS & EQUIPMENT STORES	57	2,243	3,453	4,322	87	2.3%	2.0%
Furniture & Home Furnishings Stores	571	1,087	1,720	2,201	48	2.5%	1.5%
Household Appliance Stores	572	397	391	404	1	0.3%	-4.2%
Radio, Television & Music Stores	573	759	1,342	1,717	38	2.5%	3.2%

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MONTANA JOBS BY INDUSTRY

1988, 1998, and Projected 2008

INDUSTRY	SIC*	1988 Annual Average Jobs	1998 Annual Average Jobs	Projected 2008 Jobs	Average Change 1998 to 2008	Montana Annual Growth Rate 1998-2008	U.S. Annual Growth Rate 1998-2008
EATING & DRINKING PLACES	58	22,629	30,987	35,471	448	1.4%	1.1%
Eating & Drinking Places	581	22,629	30,987	35,471	448	1.4%	1.1%
OTHER RETAIL TRADE	59	6,430	8,503	9,871	137	1.6%	2.0%
Drugstores & Proprietary (Nonprescription) Stores	591	1,279	1,146	937	(21)	-2.0%	0.6%
Liquor stores	592	42	116	134	2	1.5%	-0.2%
Pawn, Antique & Other Used Merchandise Stores	593	170	613	838	23	3.2%	5.3%
Sporting Goods, Gift Stores & Other Misc. Shopping Goods	594	2,951	4,052	4,965	91	2.1%	1.8%
Nonstore Retailers (Catalog, Door-to-Door, Vending Machine)	596	386	424	476	6	1.2%	4.5%
Liquefied Petroleum Gas & Other Fuel Dealers	598	235	242	243	0	0.0%	-0.8%
Other Retail Stores	599	1,367	1,910	2,278	37	1.8%	1.9%
FINANCE, INSURANCE & REAL ESTATE		13,147	17,086	20,807	372	2.0%	1.2%
BANKS & OTHER DEPOSITORY INSTITUTIONS	60	5,808	6,392	7,528	114	1.6%	0.3%
Federal Reserve Banks	601	D	D	161	D	D	-2.6%
Commercial Banks	602	4,250	4,630	4,959	33	0.7%	0.1%
Savings Institutions	603	670	679	996	32	3.9%	-5.0%
Credit Unions	606	680	860	1,246	39	3.8%	5.4%
Trust & Other Functions Related to Banking	609	D	D	166	D	D	3.6%
NONDEPOSITORY CREDIT INSTITUTIONS	61	480	932	1,068	14	1.4%	2.6%
Federally Sponsored Credit Agencies	611	D	D	182	D	O	4.0%
Personal Credit Institutions	614	149	240	259	2	0.8%	2.9%
Agricultural & Other Business Credit Institutions	615	D	D	79	D	D	2.8%
Mortgage Bankers & Brokers	616	115	469	548	8	1.6%	2.3%
SECURITY/COMMODITY BROKERS & SERVICES	62	641	873	1,254	38	3.7%	3.4%
Security Brokers & Dealers	621	585	763	1,105	34	3.8%	3.1%
Commodity Contracts Brokers & Dealers	622	D	18	20	0	1.1%	1.3%
Investment Counseling & Other Security Services	628	D	92	129	4	3.4%	4.8%
INSURANCE CARRIERS	63	1,365	2,338	2,972	63	2.4%	0.9%
Life Insurance	631	294	424	194	(23)	-7.6%	-0.5%
Health Insurance Plans	632	D	D	1,059	D	D	2.1%
Fire, Marine & Casualty Insurance	633	414	522	626	10	1.8%	1.1%
Financial Responsibility Insurance	635	D	179	600	42	12.8%	4.3%
Title Insurance	636	123	322	480	18	4.1%	1.6%
Pension, Health & Welfare Funds	637	D	8	9	0	1.2%	0.9%
Other Insurance Carriers	639	D	D	4	D	D	D
INSURANCE AGENTS & BROKERS	64	1,892	2,225	2,527	30	1.3%	1.0%
Insurance Agents, Brokers	641	1,892	2,225	2,527	30	1.3%	1.0%
REAL ESTATE	65	2,540	3,593	4,597	100	2.5%	1.2%
Real Estate Operators	651	1,576	1,675	2,319	64	3.3%	0.4%
Real Estate Agents & Brokers	653	585	1,397	1,999	20	1.4%	1.9%
Title Abstract Offices	654	215	266	358	9	3.0%	0.8%
Subdividers & Developers	655	164	255	321	7	2.3%	0.5%

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MONTANA JOBS BY INDUSTRY

1988, 1998, and Projected 2008

INDUSTRY	SIC*	1988 Annual Average Jobs	1998 Annual Average Jobs	Projected 2008 Jobs	Average Change 1998 to 2008	Montana Annual Growth Rate 1998-2008	U.S. Annual Growth Rate 1998-2008
HOLDING & OTHER INVESTMENT OFFICES	67	421	733	861	13	1.6%	1.6%
Offices of Holding Companies	671	353	312	325	1	0.4%	0.1%
Investment Offices	672	D	D	32	D	D	D
Educational Foundations & Trusts	673	39	248	311	8	2.3%	0.2%
Patent Owners/Lessors & Other Investing	679	D	D	193	D	D	3.7%
OTHER PRIVATE SERVICES		67,460	105,916	138,317	3,240	2.7%	2.8%
LODGING PLACES	70	6,918	9,317	10,935	162	1.6%	1.6%
Hotels & Motels	701	6,539	8,594	10,062	147	1.6%	1.7%
Rooming & Boarding Houses	702	25	22	14	(1)	-4.4%	-4.2%
Camps & Recreational Vehicle Parks	703	319	655	813	18	2.2%	0.8%
Fraternity/Sorority Houses & Other Organization Lodging	704	33	46	48	0	0.0%	0.0%
PERSONAL SERVICES	72	2,670	2,747	2,821	7	0.3%	1.0%
Laundry, Cleaning & Garment Services	721	911	1,129	1,318	19	1.6%	0.6%
Photographic Studios	722	96	150	156	1	0.4%	0.9%
Beauty Shops	723	963	793	618	(18)	-2.5%	1.3%
Barber Shops	724	42	11	9	(0)	-2.0%	-1.8%
Shoe Repair	725	14	7	5	(0)	-3.3%	0.9%
Funeral Service & Crematories	726	235	277	295	2	0.6%	1.0%
Tax Return Preparation & Other Personal Services	729	409	380	420	4	1.0%	1.4%
BUSINESS SERVICES	73	5,230	13,208	20,732	752	4.6%	4.4%
Advertising	731	314	314	451	14	3.7%	1.9%
Credit Reporting, Adjustment & Collection	732	259	287	280	(1)	-0.2%	2.8%
Photocopying, Secretarial & Commercial Art Services	733	190	332	455	12	3.2%	2.7%
Maintenance & Other Services to Buildings	734	1,178	1,666	1,931	27	1.5%	2.3%
Equipment Rental	735	310	731	1,117	39	4.3%	3.6%
Personnel Supply Services	736	900	4,625	7,259	263	4.6%	3.7%
Computer & Data Processing Services	737	380	1,678	3,558	188	7.8%	8.1%
Telemarketing & Other Business Services	738	1,699	3,575	5,683	211	4.7%	3.5%
AUTO REPAIR, RENTAL & OTHER SERVICES	75	2,108	4,050	5,296	126	2.7%	3.1%
Automotive Rental/Leasing, Without Drivers	751	309	545	779	23	3.6%	2.3%
Automobile Parking	752	D	D	63	D	D	D
Automotive Repair Shops	753	1,455	2,694	3,317	62	2.1%	2.7%
Quicklubes, Car Washes & Other Auto Services	754	D	D	1,137	D	D	4.8%
OTHER REPAIR SERVICES	78	1,058	1,349	1,551	20	1.4%	0.6%
Electrical Repair Shops	762	186	322	379	6	1.6%	1.1%
Watch, Clock & Jewelry Repair	763	0	D	3	D	D	D
Reupholstery & Furniture Repair	764	46	D	90	D	D	-1.0%
Welding, Small Engine & Other Miscellaneous Repair	769	824	959	1,079	12	1.2%	0.5%
MOTION PICTURES	78	962	1,651	1,702	6	0.3%	1.0%
Motion Picture Production	781	D	464	309	(16)	-4.0%	1.9%
Motion Picture Distribution & Services	782	D	0	0	0	0.0%	-4.4%
Motion Picture Theaters	783	494	604	646	4	0.7%	-0.2%
Videotape Rental	784	396	583	747	16	2.5%	1.1%

*Standard Industrial Classification Code

N/A=Not Available

D=Not Disclosable, fewer than 3 establishments or 1 establishment with 80% or more of industry's employment, suppressed sector's jobs included in totals

Sources: Research & Analysis Bureau, Montana Dept. of Labor & Industry, Bureau of Economic Analysis, U.S. Department of Commerce for historical self-employment and production agriculture wage and salary employment data, Bureau of Labor Statistics, U.S. Department of Labor for U.S. growth rates

MONTANA JOBS BY INDUSTRY

1988, 1998, and Projected 2008

INDUSTRY	SIC*	1988 Annual Average Jobs	1998 Annual Average Jobs	Projected 2008 Jobs	Average Change 1998 to 2008	Montana Annual Growth Rate 1998-2008	U.S. Annual Growth Rate 1998-2008
AMUSEMENT & RECREATIONAL SERVICES	79	2,965	7,222	11,243	402	4.6%	2.8%
Dance Studios, Schools & Halls	791	18	63	70	1	1.0%	1.0%
Theatrical Producers, Bands, Orchestras	792	152	308	447	14	3.9%	2.5%
Bowling Centers	793	496	542	508	(3)	-0.8%	-1.5%
Commercial Sports	794	69	210	294	8	3.4%	2.4%
Gambling, Physical Fitness Facilities, Ski Areas, Other Rec.	799	2,230	6,101	9,924	382	6.0%	3.2%
PRIVATE HEALTH SERVICES	80	23,733	32,554	40,672	812	2.3%	2.8%
Offices & Clinics of Medical Doctors	801	3,555	4,406	6,101	170	3.3%	3.5%
Offices & Clinics of Dentists	802	1,654	2,058	2,581	62	2.3%	2.7%
Offices of Osteopathic Physicians	803	12	33	52	2	4.7%	4.8%
Offices & Clinics of Other Health Professionals	804	922	1,400	1,998	60	3.8%	3.6%
Nursing & Personal Care Facilities	805	3,864	4,976	6,751	178	3.1%	2.3%
Private Hospitals	806	12,744	16,527	18,017	149	0.8%	1.0%
Medical & Dental Laboratories	807	155	203	243	4	1.8%	2.2%
Home Health Care Services	808	270	1,717	2,608	89	4.3%	6.1%
Specialty Outpatient Clinics & Other Health Services	809	557	1,234	2,323	109	8.5%	5.1%
LEGAL SERVICES	81	2,187	2,457	2,943	49	1.8%	2.1%
Legal Services	811	2,187	2,457	2,943	49	1.8%	2.1%
PRIVATE EDUCATIONAL SERVICES	82	2,282	3,443	4,103	68	1.8%	2.1%
Private Elementary & Secondary Schools	821	964	1,328	1,516	18	1.3%	3.4%
Private Colleges & Universities	822	1,142	1,661	2,086	43	2.3%	1.4%
Private Libraries	823	0	11	12	0	0.8%	1.0%
Private Vocational Schools	824	94	124	42	(8)	-10.3%	0.5%
Other Schools & Educational Services	829	82	319	447	13	3.4%	3.7%
PRIVATE SOCIAL SERVICES	83	6,097	11,513	15,171	368	2.8%	3.4%
Individual & Family Services including Counseling	832	1,700	2,854	3,690	84	2.6%	3.5%
Job Training & Vocational Rehabilitation	833	1,499	2,388	3,141	75	2.8%	2.7%
Child Day Care Services	835	904	1,869	2,698	83	3.7%	2.8%
Homes for the Aged, Children & Other Residential Care	836	1,351	2,863	3,900	104	3.1%	4.6%
Human Resource Councils & Other Social Services	839	643	1,539	1,744	21	1.3%	3.7%
MUSEUMS, ART GALLERIES & ZOOS	84	122	229	363	13	4.7%	3.6%
Museums & Art Galleries	841	0	0	332	0	0	3.0%
Botanical & Zoological Gardens	842	0	0	31	0	0	0
MEMBERSHIP ORGANIZATIONS	86	6,527	8,296	9,132	84	1.0%	1.0%
Business Associations	861	501	431	512	8	1.7%	0.5%
Professional Organizations	862	102	127	147	2	1.5%	2.2%
Labor Organizations	863	369	318	236	(8)	-2.9%	0.1%
Tribal & Other Civic & Social Associations	864	3,081	4,121	4,683	56	1.3%	0.9%
Political Organizations	865	61	20	11	(1)	-5.8%	-3.8%
Religious Organizations	866	2,251	2,701	2,854	15	0.6%	1.0%
Other Membership Organizations	869	162	678	689	11	1.8%	1.1%

*Standard Industrial Classification Code.

N/A=Not Available.

D=Not Disclosable; fewer than 3 establishments or 1 establishment with 80% or more of industry's employment; suppressed sector's jobs included in totals.

Sources: Research & Analysis Bureau, Montana Dept. of Labor & Industry; Bureau of Economic Analysis, U.S. Department of Commerce for historical self-employment and production agriculture wage and salary employment data; Bureau of Labor Statistics, U.S. Department of Labor for U.S. growth rates.

MONTANA JOBS BY INDUSTRY

1988, 1998, and Projected 2008

INDUSTRY	SIC*	1988 Annual Average Jobs	1998 Annual Average Jobs	Projected 2008 Jobs	Average Change 1998 to 2008	Montana Annual Growth Rate 1998-2008	U.S. Annual Growth Rate 1998-2008
ENGINEERING, MANAGEMENT & RESEARCH SERVICES	87	4,088	7,157	10,529	337	3.9%	2.9%
Engineering & Architectural Services	871	1,157	2,158	2,787	63	2.6%	2.3%
Accounting, Auditing & Bookkeeping Services	872	1,375	1,772	2,067	30	1.6%	1.8%
Research & Testing Services	873	695	1,270	2,691	142	7.6%	3.4%
Management & Public Relations Services	874	861	1,957	2,984	103	4.3%	3.8%
PRIVATE HOUSEHOLDS	88	388	575	939	36	6.0%	-2.3%
Private Households	881	388	575	939	38	5.0%	-2.3%
OTHER SERVICES	89	129	150	185	4	2.1%	2.8%
Other Services	899	129	150	185	4	2.1%	2.8%
GOVERNMENT		88,610	78,674	83,812	614	0.6%	0.9%
FEDERAL GOVERNMENT		13,516	12,648	12,244	(40)	-0.3%	-0.5%
U.S. Postal Service	431	2,480	2,840	2,875	4	0.1%	0.3%
Other Federal Government		11,036	9,808	9,369	(44)	-0.5%	-0.9%
STATE GOVERNMENT		19,555	23,657	26,154	250	1.0%	0.7%
Hospital	806	710	466	291	(18)	-4.6%	N/A
Education	82	8,800	12,262	14,331	207	1.6%	N/A
Other State Government		10,045	10,929	11,532	60	0.5%	N/A
LOCAL GOVERNMENT		35,539	42,369	45,414	305	0.7%	1.2%
Hospitals	806	441	448	432	(2)	-0.4%	N/A
Education	82	22,800	26,662	27,820	118	0.4%	N/A
Other Local Government		12,298	15,259	17,162	190	1.2%	N/A
TOTAL WAGE AND SALARY JOBS		289,519	380,164	443,714	6,355	1.6%	1.4%
SELF-EMPLOYMENT JOBS:		108,008	141,730	159,951	1,822	1.2%	N/A
Agricultural Production, Crops & Livestock	01 & 02	23,292	25,641	25,467	(17)	-0.1%	N/A
Agricultural Services (Veterinary, Landscape, Kennels, Other)	07	2,388	3,963	6,038	208	4.3%	N/A
Forestry (Tree Farms/Timber Tracts, Nurseries, Forestry Services)	08	408	455	388	(7)	-1.6%	N/A
Fishing, Hunting, Trapping & Game Propagation	09	443	391	504	11	2.6%	N/A
Other Nonagricultural Sectors	10-89	81,477	111,280	127,554	1,627	1.4%	N/A
TOTAL JOBS (Both Wage/Salary & Self-Employment)		397,527	521,894	603,665	8,177	1.6%	1.4%

*Standard Industrial Classification Code

N/A=Not Available

D=Not Disclosable, fewer than 3 establishments or 1 establishment with 80% or more of industry's employment; suppressed sector's jobs included in totals.

Sources: Research & Analysis Bureau, Montana Dept. of Labor & Industry; Bureau of Economic Analysis, U.S. Department of Commerce for historical self-employment and production agriculture wage and salary employment data, Bureau of Labor Statistics, U.S. Department of Labor for U.S. growth rates

Job Projections for Montana's Occupations, 1998-2008

It is estimated there will be about 205,000 wage and salary and self-employment jobs opening up in Montana from 1998 through 2008. About 82,000 of those jobs will be generated by industry growth in the state. The remaining jobs will be replacement jobs filled by employees

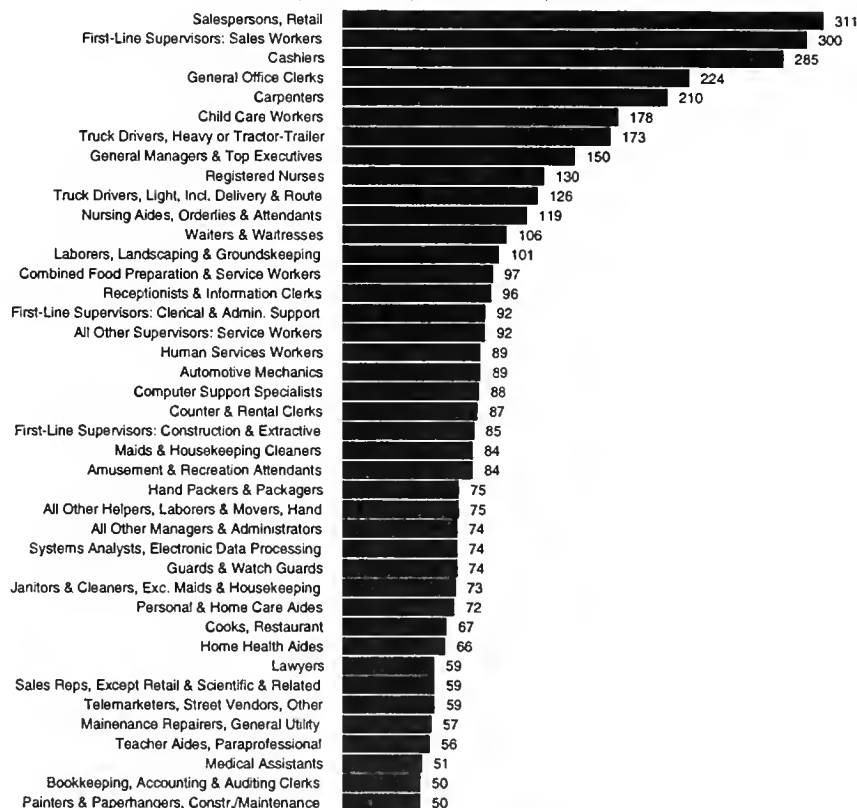
after workers leave existing jobs for various reasons. Montana workers can expect to see about 21,000 full- and part-time jobs opening up each year from a combination of industry growth and worker replacement.

Occupations Projected to Increase from Industry Growth

Occupations projected to show the largest job increases because of industry growth are salespersons, retail; first-line supervisors and managers/supervisors, sales and related workers; cashiers; general office clerks; carpenters; child care workers; truck drivers, heavy or tractor-trailer; general managers and top executives; registered nurses; truck drivers, light, including delivery and route workers; nursing aides, orderlies and attendants; and waiters and waitresses. *See chart on this page.*

More detailed information on Montana's growing occupations can be found on the Research and Analysis Bureau's website at <http://rad.dli.state.mt.us/>.

Montana's Growing Occupations Jobs Gained Annually Due to Industry Growth 1998-2008 (Excludes Replacement Jobs)



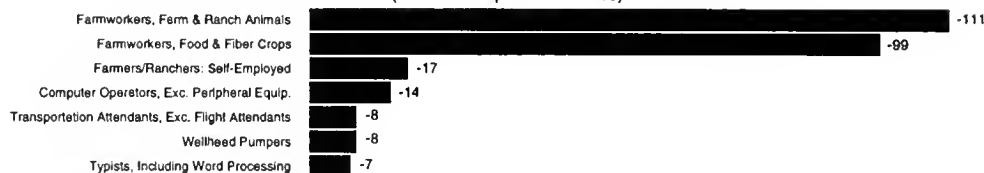
Source: Research & Analysis Bureau, Montana Department of Labor & Industry

Occupations Projected to Show Decline Due to Industry Decline and Changing Technology

The two occupations projected to show the largest job declines due to declining industries and changing technology are farmworkers, farm and ranch animals, with an estimated annual loss of 111 jobs a year, and farmworkers, food and fiber crops, with an estimated annual loss of 99 jobs a year. The farmers/ranchers, self-employed occupation is projected to lose about 17 jobs a year, and computer operators, except peripheral equipment is projected to decline by about 14 jobs a year. Other occupations are projected to show smaller job losses. *See chart at right.*

Find more detailed information about Montana's declining occupations on the Research and Analysis Bureau website at <http://rad.dli.state.mt.us/>.

Montana's Declining Occupations
Jobs Lost Annually Due to Industry Decline
1998-2008
(Excludes Replacement Jobs)



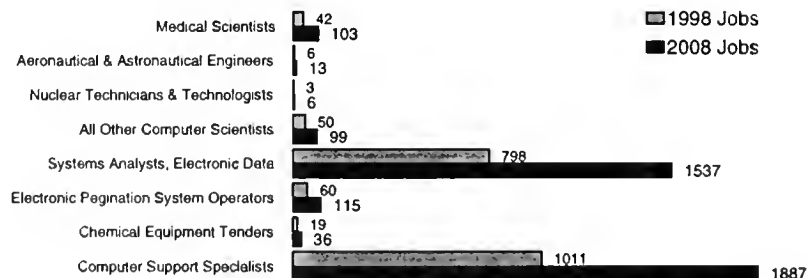
Source: Research & Analysis Bureau, Montana Department of Labor & Industry

Fastest Growing Occupations (Which Often Involve Small Number of Jobs)

The fastest growing occupations are those occupations with the largest percentage gains in total jobs. Some of those occupations with large percentage gains involve small numbers of jobs. For instance, projections show the occupation of nuclear technicians and technologists achieving a 100 percent gain in jobs, 1998-2008—but involving a net projected gain of only three jobs. *See chart at right.*

See more detailed information about Montana's growing occupations on the Research and Analysis Bureau website at <http://rad.dli.state.mt.us/>.

Montana's Fastest Growing Occupations
Total Projected Job Gain, 1998 - 2008



Source: Research & Analysis Bureau, Montana Department of Labor & Industry

Occupations Increasing Due to Both Growth AND Replacements Provide Largest Number of Jobs

Usually openings resulting from replacement needs are greater than those from industry growth—and more jobs will generally be available in large occupations that experience a need to replace workers rather than in occupations experiencing actual growth in demand.

The *table on this page* shows annual job opening projections based on growth AND replacements. Growth is the increase in demand for workers in specific occupations—and replacements arise from the need to replace workers leaving the labor force (e.g., due to death, retirement, going home to care for children or a sick relative, taking a job in another state, etc.).

In Montana, occupations projected to generate over 300 job openings annually from growth AND replacements are salespersons, retail; cashiers; waiters and waitresses; combined food preparation and service workers; general office clerks; carpenters; first-line supervisors and managers/supervisors, sales and related workers; and farmers/ranchers: self-employed. (Note: The farmers/ranchers: self-employed occupation continues to generate large numbers of jobs each year through replacements, even though it is projected to lose about 17 jobs a year due to industry decline. See previous page.)

The table on this page shows some of the occupations in Montana increasing due to both an increase in demand AND the replacement of workers leaving jobs for a variety of reasons.

Specific Job Projections by Occupation

Please refer to the following pages of data for specific occupational job projection information presented in alphabetical order, by occupation. *Occupations with annual (rather than hourly) wage information are listed on page 36.*

Montana occupational job projection information is presented in a variety of data sorts on the Research and Analysis Bureau's website at <http://rad.dli.state.mt.us/>.

Montana Occupations with Most Annual Job Openings Due to Growth AND Replacements 1998 - 2008 (Includes Self-Employed)			
Occupation	Average Annual Openings		
	Due to Growth	Due to Replacements	Total Annual Openings*
Salespersons, Retail	311	572	883
Cashiers	285	468	753
Waiters & Waitresses	108	446	554
Combined Food Preparation & Service Workers	87	450	537
General Office Clerks	224	303	527
Carpenters	210	317	527
First-Line Supervisors & Managers/Supervisors, Sales & Related Workers	300	213	513
Farmers/Ranchers: Self-Employed	-17	397	380
Truck Drivers, Heavy or Tractor-Trailer	173	124	297
General Managers & Top Executives	150	121	271
Janitors & Cleaners, Except Maids & Housekeeping Cleaners	73	196	269
Child Care Workers	178	91	269
Bartenders	26	235	261
Registered Nurses	130	113	243
Food Preparation Workers	38	202	240
All Other Helpers, Laborers & Material Movers, Hand	75	182	257
Bookkeeping, Accounting & Auditing Clerks	50	173	223
First-Line Supervisors & Managers/Supervisors: Construction Trades & Extractive Workers	85	128	213
Automotive Mechanics	88	122	210
Truck Drivers, Light, Including Delivery & Route Workers	128	78	206
Teachers, Secondary School	0	201	201
Nursing Aides, Orderlies & Attendants	119	89	208
Laborers, Landscaping & Groundskeeping	101	79	180
First-Line Supervisors & Managers/Supervisors: Clerical & Administrative Support Workers	92	87	179
Maids & Housekeeping Cleaners	84	85	169
All Other Supervisors & Managers/Supervisors - Service Workers	82	88	170
All Other Managers & Administrators	74	102	176
Counter & Rental Clerks	87	87	174
Receptionists & Information Clerks	98	71	169
Teachers, Elementary School	3	160	163
Cooks, Restaurant	67	96	163
Sales Representatives, Except Retail & Scientific & Related Products & Services	58	87	145
Maintenance Repairs, General Utility	57	85	142
Hairdressers, Hairstylists & Cosmetologists	38	112	150
Secretaries, Except Legal or Medical	8	124	132
Human Services Workers	88	38	126
Hand Packers & Packagers	75	53	128
Personal & Home Care Aides	72	53	125
Telemarketers, Door-to-Door Sales Workers, News & Street Vendors, Other Related	58	85	143
Painters & Paperhangers, Construction & Maintenance	50	72	122
Guards & Watch Guards	74	46	120
Counter Attendants: Lunchroom, Coffee Shop or Cafeteria	12	104	116
Amusement & Recreation Attendants	84	29	113
Lawyers	58	39	97
Tellers	17	81	98
Cooks, Fast Food	38	57	95
Computer Support Specialists	88	8	96
Food Service & Lodging Managers	42	51	93
Accountants & Auditors	43	50	93
Home Health Aides	66	27	93
Licensed Practical Nurses	41	51	92
*Numbers may not add due to rounding			
Source: Research & Analysis Bureau, Montana Department of Labor & Industry.			

Montana Occupational Job Projections, 1998 - 2008

Montana - Statewide - All Industries (Includes Self-Employed)

All Occupations - Listed Alphabetically

Occupational Code	Occupation	Job Estimates				Compounded Annual Growth Rate	Average Annual Openings			1998 Mean Wage	Entry Wage	Training Level** Required
		Base Year 1998	Projected Year 2008	Total Change	Total % Change		Due to Growth	Due to Replacements	Total Annual Openings*			
21114	Accountants & Auditors	3,244	3,873	429	13.2%	1.3%	43	50	93	\$16.02	\$12.77	05
25313	Actuaries	28	31	5	19.2%	1.8%	1	0	1			05
26105	Adjudicators, Hearing Officers & Judicial Reviewers	128	130	4	3.2%	0.3%	0	2	2	\$17.85	\$15.82	04
53123	Adjustment Clerks	705	986	281	37.0%	3.2%	28	5	31	\$9.10	\$8.32	11
13014	Administrative Services Managers	520	611	91	17.5%	1.8%	9	9	18	\$19.38	\$12.75	04
53908	Advertising Clerks	39	41	2	5.1%	0.5%	0	1	1	\$9.00	\$8.58	11
22102	Aeronautical & Astronautical Engineers	8	13	7	118.7%	8.0%	1	0	1			05
24305	Agricultural & Food Scientists	344	381	37	10.8%	1.0%	4	8	13	\$21.77	\$15.47	05
22123	Agricultural Engineers	17	22	5	29.4%	2.8%	1	0	1			05
31201	Agricultural Sciences Teachers, Postsecondary	97	87	0	0.0%	0.0%	0	3	3			02
87702	Air Hammer Operators	4	4	0	0.0%	0.0%	0	0	0			10
85326	Aircraft Engine Specialists	28	30	2	7.1%	0.7%	0	1	1			07
85323	Aircraft Mechanics	258	298	33	12.9%	1.2%	3	5	8	\$16.93	\$12.60	07
97702	Aircraft Pilots & Flight Engineers	222	234	12	5.4%	0.5%	1	5	6			05
39002	Airplane Dispatchers & Air Traffic Controllers	110	115	6	5.5%	0.5%	1	3	4	\$23.90	\$20.85	09
79999	All Other Agricultural, Forestry, Fishing & Related Workers - NEC***	988	1,284	278	28.2%	2.5%	28	30	58	\$10.89	\$8.75	11
70999	All Other Cleaning & Building Service Workers - NEC***	409	442	33	8.1%	0.8%	3	9	12	\$8.40	\$8.44	11
59999	All Other Clerical & Administrative Support Workers - NEC***	1,285	1,449	184	14.5%	1.4%	19	20	39	\$10.72	\$8.08	11
65599	All Other Communications Equipment Mechanics, Installers & Repairers - NEC***	207	265	59	28.5%	2.5%	6	6	12	\$17.55	\$10.26	07
57199	All Other Communications Equipment Operators - NEC***	8	7	-1	-12.5%	-1.3%	0	0	0			10
25199	All Other Computer Scientists - NEC***	50	99	49	98.0%	7.1%	5	0	5	\$15.90	\$9.64	05
87999	All Other Construction & Extractive Workers, Except Helpers - NEC***	101	158	55	54.5%	4.4%	8	3	9			10
67899	All Other Construction Trades Workers - NEC***	254	301	47	18.5%	1.7%	5	8	11	\$10.93	\$8.20	10
66799	All Other Electrical & Electronic Equipment Mechanics, Installers & Repairers - NEC***	151	208	57	37.7%	3.3%	6	4	10	\$14.25	\$10.95	09
22599	All Other Engineering & Related Technicians & Technologists - NEC***	500	512	12	2.4%	0.2%	1	13	14	\$18.28	\$11.14	08
22199	All Other Engineers - NEC***	518	620	102	19.7%	1.9%	10	15	25	\$21.23	\$15.10	05
87989	All Other Extractive Workers, Except Helpers - NEC***	93	104	21	25.3%	2.3%	2	2	4			10
21199	All Other Financial Specialists - NEC***	424	500	76	17.9%	1.7%	8	9	17	\$14.43	\$11.78	05
61099	All Other First-Line Supervisors & Mngrs/Supers, Production/Construct/Maintenance - NEC***	858	729	73	11.1%	1.1%	7	17	24	\$19.14	\$13.60	08
65099	All Other Food Service Workers - NEC***	584	884	100	17.1%	1.8%	10	22	32	\$8.58	\$5.89	11
98799	All Other Freight, Stock & Material Movers, Hand - NEC***	1,753	1,805	52	3.0%	0.3%	5	84	89	\$8.85	\$8.94	11
93999	All Other Hand Workers - NEC***	910	1,242	332	38.5%	3.2%	33	24	57	\$7.38	\$8.02	11
32199	All Other Health Diagnosing & Treating Practitioners - NEC***	27	45	18	88.7%	5.2%	2	1	3	\$28.56	\$20.45	01
32999	All Other Health Professionals, Paraprofessionals & Technicians - NEC***	739	1,017	278	37.6%	3.2%	28	18	46	\$14.18	\$10.40	08
66099	All Other Health Service Workers - NEC***	392	471	89	23.3%	2.1%	9	9	18	\$8.57	\$8.85	11
98999	All Other Helpers, Laborers & Material Movers, Hand - NEC***	5,232	5,981	749	14.3%	1.4%	75	182	237	\$9.28	\$8.93	11
83099	All Other Inspectors, Testers & Related Workers - NEC***	152	165	13	8.8%	0.8%	1	3	4			08
26399	All Other Legal Assistants & Technicians, Except Clerical - NEC***	111	138	25	22.5%	2.1%	3	1	4	\$11.31	\$8.88	08
24399	All Other Life Scientists - NEC***	390	467	77	19.7%	1.8%	9	6	16			02
92998	All Other Machine Operators & Tenders - NEC***	705	728	21	3.0%	0.3%	2	10	12	\$15.18	\$8.84	10
92997	All Other Machine Setters & Set-Up Operators - NEC***	455	465	10	2.2%	0.2%	1	7	8			10
85119	All Other Machinery Maintenance Mechanics - NEC***	181	113	-48	-29.8%	-3.5%	-5	4	4	\$18.80	\$18.36	09
21999	All Other Management Support Workers - NEC***	1,844	1,814	170	10.3%	1.0%	17	31	48	\$18.92	\$11.24	05
19999	All Other Managers & Administrators - NEC***	5,819	8,580	741	12.7%	1.2%	74	102	176	\$20.59	\$14.21	04

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Montana Occupational Job Projections, 1998 - 2008

Montana - Statewide - All Industries (Includes Self-Employed)

All Occupations - Listed Alphabetically

Occupational Code	Occupation	Job Estimates				Compounded Annual Growth Rate	Average Annual Openings			1998 Wages (Hourly)		Training Level** Required
		Base Year 1999	Projected Year 2008	Total Change	Total % Change		Due to Growth	Due to Replacements	Total Annual Openings*	Mean Wage	Entry Wage	
97989	All Other Material Moving Equipment Operators - NEC***	552	810	58	10.5%	1.0%	8	13	19	\$11.39	\$8.74	10
58099	All Other Material Recording, Scheduling & Distributing Workers - NEC***	118	114	-2	-1.7%	-0.2%	0	3	3	\$13.43	\$8.70	11
25319	All Other Mathematical Scientists - NEC***	4	3	-1	-25.0%	-2.8%	0	0	0			03
95999	All Other Mechanics, Installers & Repairers - NEC***	715	793	78	10.9%	1.0%	8	12	20	\$12.50	\$8.73	09
92198	All Other Metal & Plastic (Cutting/Forming/Processing) Machine Operators & Tenders - NEC***	38	41	3	7.9%	0.8%	0	1	1	\$11.73	\$7.88	10
87949	All Other Mining Machine Operators - NEC***	87	35	-52	-59.8%	-8.7%	-5	2	2			10
97199	All Other Motor Vehicle Operators - NEC***	91	76	-15	-15.5%	-1.8%	-2	2	2	\$12.38	\$8.15	11
58099	All Other Office Machine Operators - NEC***	87	52	-15	-22.4%	-2.5%	-2	2	2	\$9.30	\$7.02	11
24599	All Other Physical & Life Science Technicians & Technologists - NEC***	480	535	55	11.5%	1.1%	8	11	17	\$11.82	\$7.95	08
31209	All Other Physical Sciences Teachers, Postsecondary - NEC***	297	372	75	25.3%	2.3%	8	8	16			02
24199	All Other Physical Scientists - NEC***	354	469	105	29.7%	2.8%	11	9	20	\$18.84	\$12.48	05
95099	All Other Plant & System Operators - NEC***	273	308	35	12.8%	1.2%	4	9	13	\$14.51	\$10.48	09
31299	All Other Postsecondary Teachers - NEC***	971	1,215	244	25.1%	2.3%	24	27	51			02
93197	All Other Precision Assemblers - NEC***	19	21	2	10.5%	1.0%	0	0	0			08
89199	All Other Precision Metal Workers - NEC***	24	31	7	29.2%	2.8%	1	1	2	\$12.33	\$9.18	09
89799	All Other Precision Printing Workers - NEC***	12	13	1	8.3%	0.8%	0	0	0			09
89599	All Other Precision Textile, Apparel & Furnishings Workers - NEC***	12	18	4	33.3%	2.9%	0	0	0			09
89399	All Other Precision Woodworkers - NEC***	31	38	7	22.8%	2.1%	1	1	2			09
89999	All Other Precision Workers - NEC***	119	157	38	31.9%	2.8%	4	3	7	\$9.88	\$8.98	09
92519	All Other Printing Press Setters & Set-Up Operators - NEC***	19	20	1	5.3%	0.5%	0	0	0			10
92549	All Other Printing, Binding & Related Machine Operators & Tenders - NEC***	18	14	-2	-12.5%	-1.3%	0	0	0			10
39999	All Other Professional, Paraprofessional & Technical Workers - NEC***	1,558	1,875	319	20.5%	1.9%	32	38	70	\$18.38	\$10.77	05
83099	All Other Protective Service Workers - NEC***	273	328	55	20.1%	1.9%	8	19	25	\$9.17	\$8.34	11
97399	All Other Rail Vehicle Operators & Controllers - NEC***	43	22	-21	-48.8%	-8.5%	-2	1	1			10
27599	All Other Religious Workers - NEC***	4	4	0	0.0%	0.0%	0	0	0			05
49999	All Other Sales & Related Workers - NEC***	921	1,084	143	15.5%	1.5%	14	28	42	\$10.30	\$8.81	10
43099	All Other Sales Representatives & Salespersons, Services - NEC*	92	140	48	52.2%	4.3%	5	3	8	\$18.08	\$7.71	10
89999	All Other Service Workers - NEC*	1,118	1,333	217	19.4%	1.8%	22	31	53	\$8.78	\$8.00	11
31239	All Other Social Sciences Teachers, Postsecondary - NEC***	184	231	47	25.5%	2.3%	5	5	10			02
27199	All Other Social Scientists - NEC***	194	227	33	17.0%	1.8%	3	4	7	\$19.70	\$14.23	03
81099	All Other Supervisors & Managers/Supervisors - Service Workers - NEC***	3,779	4,700	921	24.4%	2.2%	92	88	178	\$9.80	\$7.10	08
31399	All Other Teachers & Instructors - NEC***	527	587	40	7.6%	0.7%	4	8	10			05
32399	All Other Therapists - NEC***	102	130	28	27.5%	2.5%	3	2	5	\$18.78	\$11.59	05
73099	All Other Timber Cutting & Related Logging Workers - NEC***	107	102	-5	-4.7%	-0.5%	-1	3	3	\$11.30	\$7.57	11
97999	All Other Transportation & Material-Moving Equipment Operators - NEC***	92	121	29	31.5%	2.8%	3	2	5	\$11.22	\$7.28	10
97899	All Other Transportation & Related Workers - NEC***	344	351	7	2.0%	0.2%	1	6	7	\$14.19	\$12.10	10
68023	Ambulance Drivers & Attendants, Except Emergency Medical Technicians	18	22	4	22.2%	2.0%	0	0	0			11
68014	Amusement & Recreation Attendants	1,802	2,443	841	52.5%	4.3%	84	29	113	\$8.14	\$5.56	11
79017	Animal Caretakers, Except Farm	822	908	84	10.2%	1.0%	8	12	20	\$7.38	\$5.74	11
34017	Announcers, Radio & Television	307	293	-14	-4.8%	-0.5%	-1	7	7	\$7.93	\$5.81	10
31231	Anthropology & Sociology Teachers, Postsecondary	38	47	9	23.7%	2.2%	1	1	2			02
43011	Appraisers, Real Estate	354	396	42	11.9%	1.1%	4	7	11	\$17.00	\$10.97	05
22302	Architects, Except Landscape & Marine	591	695	104	17.8%	1.8%	10	9	19	\$18.68	\$14.82	05
51223	Architecture Teachers, Postsecondary	17	21	4	23.5%	2.1%	0	0	0			02

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Montana Occupational Job Projections, 1998 - 2008

Montana - Statewide - All Industries (Includes Self-Employed)

All Occupations - Listed Alphabetically

Occupational Code	Occupation	Job Estimates				Compounded Annual Growth Rate	Average Annual Openings			1998 Wages (Hourly)		Training Level** Required
		Base Year 1998	Projected Year 2008	Total Change	Total % Change		Due to Growth	Due to Replacements	Total Annual Openings*	Mean Wage	Entry Wage	
31232	Area, Ethnic & Cultural Studies Teachers, Postsecondary	24	31	7	29.2%	2.6%	1	1	2			02
31218	Art, Drama & Music Teachers, Postsecondary	222	278	56	25.2%	2.3%	8	8	12			02
34035	Artists & Related Workers	1,295	1,625	230	17.8%	1.7%	23	27	50	\$13.82	\$10.21	04
93956	Assemblers & Fabricators, Except Machine/Electrical/Electronic/Precision	1,573	1,783	210	13.4%	1.3%	21	28	49	\$8.30	\$8.49	11
21917	Assessors	186	194	8	4.3%	0.4%	1	4	5			05
34058	Athletes, Coaches, Umpires & Related Workers	100	121	21	21.0%	1.9%	2	4	6			09
24108	Atmospheric & Space Scientists	81	82	1	1.8%	0.2%	0	2	2	\$27.05	\$22.13	05
31608	Audio-Visual Specialists	48	48	2	4.3%	0.4%	0	1	1			05
85305	Automotive Body & Related Repairers	1,755	2,023	268	15.3%	1.4%	27	51	78	\$11.83	\$8.93	09
85302	Automotive Mechanics	4,918	5,811	893	18.2%	1.7%	89	122	211	\$12.14	\$8.99	07
95023	Auxiliary Equipment Operators, Power	52	51	-1	-1.9%	-0.2%	0	2	2	\$20.30	\$17.45	09
68023	Baggage Porters & Bellhops	110	123	13	11.8%	1.1%	1	2	3	\$8.97	\$5.78	11
93023	Bailiffs	33	34	1	3.0%	0.3%	0	0	0	\$9.31	\$8.25	09
65021	Bakers, Bread & Pastry	908	1,064	156	17.2%	1.6%	18	24	40	\$8.09	\$6.70	10
89805	Bakers, Manufacturing	68	74	8	12.1%	1.2%	1	1	2			10
88002	Barbers	272	307	35	12.9%	1.2%	4	8	12			07
65005	Bartenders	5,491	5,773	282	5.1%	0.5%	28	235	263	\$8.37	\$5.89	11
85951	Bicycle Repairers	81	75	14	23.0%	2.1%	1	1	2	\$6.68	\$5.70	10
53508	Bill & Account Collectors	604	778	172	28.5%	2.5%	17	18	33	\$10.82	\$7.84	11
55344	Billing, Cost & Rate Clerks	1,188	1,448	262	22.1%	2.0%	28	24	50	\$9.50	\$7.90	11
56002	Billing, Posting & Calculating Machine Operators	133	128	-5	-3.8%	-0.4%	-1	3	3	\$9.81	\$8.44	11
92546	Bindery Machine Operators & Tenders	91	89	-2	-2.2%	-0.2%	0	2	2	\$9.73	\$8.57	10
92525	Bindery Machine Setters and Set-Up Operators	42	48	6	14.3%	1.3%	1	1	2	\$10.17	\$7.81	10
24308	Biological Scientists	945	1,234	289	30.8%	2.7%	29	20	48	\$21.14	\$15.94	02
24502	Biological/Agricultural/Food Technicians & Technologists, Except Health	309	299	-10	-3.2%	-0.3%	-1	7	7	\$11.85	\$9.50	08
67905	Blasters & Explosives Workers	29	19	-10	-34.5%	-4.1%	-1	1	1	\$19.14	\$17.41	09
92928	Boiler Operators & Tenders, Low Pressure	128	108	-20	-15.8%	-1.7%	-2	3	3	\$12.23	\$10.92	10
89135	Boilermakers	25	22	-3	-12.0%	-1.3%	0	1	1	\$20.57	\$18.54	09
56338	Bookkeeping, Accounting & Auditing Clerks	9,285	9,764	499	5.4%	0.5%	50	173	223	\$9.51	\$7.38	10
87302	Brickmasons	392	495	103	26.3%	2.4%	10	8	18	\$18.82	\$12.63	09
97802	Bridge, Lock & Lighthouse Tenders	19	22	3	15.8%	1.5%	0	1	1			10
34014	Broadcast News Analysts	44	50	6	13.5%	1.3%	1	1	2	\$11.12	\$7.54	04
34028	Broadcast Technicians	343	362	19	5.5%	0.5%	2	9	11	\$11.55	\$7.77	07
53128	Brokerage Clerks	83	89	28	41.3%	3.5%	3	1	4	\$13.32	\$10.43	10
43005	Brokers, Real Estate	297	355	58	19.5%	1.8%	6	8	12	\$38.88	\$22.89	08
21117	Budget Analysts	114	124	10	8.8%	0.8%	1	2	3	\$19.31	\$15.95	05
85311	Bus & Truck Mechanics & Diesel Engine Specialists	1,237	1,405	168	13.8%	1.3%	17	27	44	\$13.87	\$11.47	09
97108	Bus Drivers, Except School	421	448	27	6.4%	0.6%	3	8	11	\$9.08	\$7.20	10
97111	Bus Drivers, School	1,760	1,708	-54	-3.1%	-0.3%	-5	32	32	\$9.43	\$8.59	11
31242	Business Teachers, Postsecondary	346	432	87	25.2%	2.3%	9	10	19			02
85023	Butchers & Meatcutters	679	617	-62	-10.7%	-1.1%	-8	14	14	\$10.55	\$8.35	09
89311	Cabinetmakers & Bench Carpenters	1,038	1,293	255	24.8%	2.2%	28	12	38	\$10.40	\$8.42	09
89713	Camera Operators	10	6	-2	-20.0%	-2.2%	0	0	0			09
34028	Camera Operators, Television & Motion Picture	82	98	14	17.1%	1.8%	1	1	2	\$8.87	\$5.82	10

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Montana Occupational Job Projections, 1998 - 2008

Montana - Statewide - All Industries (Includes Self-Employed)

All Occupations - Listed Alphabetically

Occupational Code	Occupation	Job Estimates				Compounded Annual Growth Rate	Average Annual Openings			1998 Wages (Hourly)		Training Level** Required
		Base Year 1998	Projected Year 2008	Total Change	Total % Change		Due to Growth	Due to Replacements	Total Annual Openings*	Mean Wage	Entry Wage	
93935	Cannery Workers	12	11	-1	-8.3%	-0.9%	0	0	0			11
32925	Cardiology Technologists	44	64	20	45.5%	3.8%	2	1	3	\$17.45	\$14.59	08
97102	Carpenters	11,913	13,911	2,098	17.8%	1.7%	210	317	627	\$12.90	\$11.16	09
87802	Carpent Installers	131	182	31	23.7%	2.2%	3	3	6	\$8.98	\$7.50	10
49023	Cashiers	10,725	13,571	2,846	28.6%	2.4%	285	468	753	\$8.79	\$5.85	11
87105	Ceiling Tile Installers & Acoustical Carpenters	13	17	4	30.8%	2.7%	0	0	0			10
92958	Cementing & Gluing Machine Operators & Tenders	134	115	-19	-14.2%	-1.5%	-2	3	3	\$11.93	\$10.59	10
85502	Central Office & PBX Installers & Repairers	283	485	202	71.4%	6.5%	20	9	29	\$19.97	\$18.48	07
22114	Chemical Engineers	59	66	7	11.9%	1.1%	1	1	2	\$28.51	\$26.19	06
92936	Chemical Equipment Controllers & Operators	182	190	8	4.4%	0.4%	1	4	5			10
92938	Chemical Equipment Tenders	19	38	17	89.5%	6.8%	2	0	2			10
95008	Chemical Plant & System Operators	24	37	13	54.2%	4.4%	1	1	2			09
24505	Chemical Technicians & Technologists, Except Health	200	298	98	49.0%	4.1%	10	5	15	\$13.55	\$11.01	08
31204	Chemistry Teachers, Postsecondary	94	118	24	25.5%	2.3%	2	3	5			02
24105	Chemists, Except Biochemists	105	129	24	22.9%	2.1%	2	2	4	\$10.17	\$14.92	05
68038	Child Care Workers	8,255	11,032	1,777	19.2%	1.8%	178	91	269	\$8.12	\$5.60	11
32113	Chiropractors	495	571	78	15.4%	1.4%	8	10	18			01
73005	Choke Setters	44	37	-7	-15.9%	-1.7%	-1	1	1	\$15.30	\$14.14	11
22502	Civil Engineering Technicians & Technologists	349	414	65	18.8%	1.7%	7	9	16			06
22121	Civil Engineers, Including Traffic	930	1,128	198	21.1%	1.9%	20	18	38	\$22.23	\$16.22	05
21921	Claims Examiners, Property & Casualty Insurance	128	158	32	25.4%	2.3%	3	2	5	\$15.78	\$14.42	05
21502	Claims Takers, Unemployment Benefits	58	50	-9	-15.3%	-1.8%	-1	1	1			10
92958	Cleaning, Washing & Pickling Equipment Operators & Tenders	40	28	-11	-27.5%	-3.2%	-1	1	1	\$13.58	\$11.83	10
27502	Clergy	404	434	30	7.4%	0.7%	3	8	11	\$10.64	\$8.07	01
92953	Coating, Painting & Spraying Machine Operators & Tenders	87	104	17	19.5%	1.8%	2	2	4	\$8.90	\$8.47	10
92951	Coating, Painting & Spraying Machine Setters & Set-Up Operators	11	16	4	38.4%	3.2%	0	0	0			10
93908	Coil Winders, Tapers & Finishers	11	17	8	54.5%	4.5%	1	0	1			11
85947	Coin & Vending Machine Servicers & Repairers	113	140	27	23.9%	2.2%	3	3	6	\$11.98	\$9.82	09
91508	Combination Machine Tool Operators & Tenders, Metal & Plastic	132	165	23	17.4%	1.8%	2	3	5			10
91505	Combination Machine Tool Setters & Set-Up Operators, Metal & Plastic	17	20	3	17.8%	1.6%	0	0	0			10
85041	Combined Food Preparation & Service Workers	8,170	9,141	871	11.9%	1.1%	97	450	547	\$6.88	\$5.55	11
31213	Communications Teachers, Postsecondary	45	64	19	42.2%	3.6%	2	1	3			02
15023	Communications, Transportation & Utilities Operations Managers	438	468	32	7.3%	0.7%	3	8	11	\$23.54	\$18.23	04
21911	Compliance Officers & Enforcement Inspectors, Except Construction	918	1,009	91	9.9%	1.0%	9	17	26			08
22127	Computer Engineers	105	182	57	54.3%	4.4%	8	1	7	\$28.77	\$20.60	05
66011	Computer Operators, Except Peripheral Equipment	870	635	-135	-20.1%	-2.2%	-14	10	10	\$10.53	\$8.05	10
25108	Computer Programmer Aides	388	410	22	5.7%	0.8%	2	12	14	\$14.44	\$11.82	07
25105	Computer Programmers	771	994	223	28.9%	2.8%	22	24	48	\$19.10	\$14.52	06
31228	Computer Science Teachers, Postsecondary	98	149	51	52.0%	4.3%	5	3	8			02
25104	Computer Support Specialists	1,011	1,687	876	88.8%	8.4%	88	8	94	\$14.99	\$11.44	06
87311	Concrete & Terrazzo Finishers	421	503	82	19.5%	1.8%	8	5	13	\$12.22	\$10.56	09
21908	Construction & Building Inspectors	182	215	33	18.1%	1.7%	3	5	8	\$15.14	\$13.06	08
15017	Construction Managers	517	853	138	28.3%	2.4%	14	9	23	\$21.26	\$17.80	05
87941	Continuous Mining Machine Operators	9	8	-1	-11.1%	-1.2%	0	0	0			09

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Montana Occupational Job Projections, 1998 - 2008

Montana - Statewide - All Industries (Includes Self-Employed)

All Occupations - Listed Alphabetically

Occupational Code	Occupation	Job Estimates				Compounded Annual Growth Rate	Average Annual Openings			1998 Wages (Hourly)		Training Level** Required
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97951	Conveyor Operators & Tenders	122	117	-5	-4.1%	-0.4%	-1	3	3	\$10.08	\$7.88	10
92917	Cooking Machine Operators & Tenders, Food & Tobacco	8	8	-2	-26.0%	-2.8%	0	0	0			10
85032	Cooks, Fast Food	2,172	2,585	393	18.1%	1.7%	38	57	96	\$5.85	\$5.52	11
85028	Cooks, Institution or Cafeteria	1,632	1,512	-20	-1.3%	-0.1%	-2	40	40	\$7.99	\$8.59	09
85028	Cooks, Restaurant	3,874	4,347	873	18.3%	1.7%	87	98	183	\$7.29	\$8.18	09
55035	Cooks, Short Order	1,185	1,483	278	23.5%	2.1%	28	31	59	\$8.48	\$5.72	11
83017	Correction Officers & Jailers	883	1,200	317	35.9%	3.1%	32	24	56			09
55317	Correspondence Clerks	25	30	5	20.0%	1.8%	1	1	2			11
21902	Cost Estimators	348	434	88	25.4%	2.3%	9	4	13	\$18.78	\$12.39	05
49017	Counter & Rental Clerks	2,010	2,883	873	43.4%	3.7%	87	87	174	\$8.77	\$6.84	11
85017	Counter Attendants: Lunchroom, Coffee Shop or Cafeteria	1,257	1,380	123	9.8%	0.9%	12	104	116	\$8.33	\$5.85	11
53702	Court Clerks	354	400	46	13.0%	1.2%	5	8	11	\$10.32	\$10.14	11
97944	Crane & Tower Operators	58	60	2	3.4%	0.3%	0	1	1	\$14.08	\$10.51	10
21105	Credit Analysts	125	143	18	14.4%	1.4%	2	3	5	\$18.31	\$12.60	05
53114	Credit Authorizers	4	5	1	25.0%	2.3%	0	0	0			11
53117	Credit Checkers	188	238	42	21.4%	2.0%	4	1	5	\$14.30	\$10.89	11
63028	Criminal Investigators, Public Service	70	81	11	16.7%	1.5%	1	2	3	\$27.53	\$23.78	05
31248	Criminal Justice & Law Enforcement Teachers, Postsecondary	18	22	4	22.2%	2.0%	0	0	0			02
63044	Crossing Guards	120	120	0	0.0%	0.0%	0	4	4	\$8.76	\$5.81	11
92965	Crushing, Grinding, Mixing & Blending Machine Operators & Tenders	298	280	-18	-5.4%	-0.8%	-2	7	7	\$12.83	\$8.95	10
31511	Custodians, Archivists, Museum Technicians & Conservators	68	82	14	20.8%	1.9%	1	2	3	\$13.18	\$9.73	03
89505	Custom Tailors & Sewers	603	879	76	12.8%	1.2%	8	11	19	\$7.48	\$8.07	08
55335	Customer Service Representatives, Utilities	342	384	22	8.4%	0.8%	2	8	10	\$11.60	\$9.41	11
93926	Cutters & Trimmers, Hand	59	84	25	42.4%	3.6%	3	1	4	\$8.19	\$8.22	11
92944	Cutting & Slicing Machine Operators & Tenders	103	129	28	25.2%	2.3%	3	2	5	\$10.24	\$7.93	10
92941	Cutting & Slicing Machine Setters & Set-Up Operators	87	99	32	47.8%	4.0%	3	2	5			10
92932	Dairy Processing Equipment Operators, Including Setters	31	26	-6	-18.4%	-2.1%	-1	1	1			10
34053	Dancers & Choreographers	12	16	3	25.0%	2.3%	0	0	0			07
56017	Data Entry Keyers, Except Composing	533	827	94	17.8%	1.8%	9	4	13	\$8.71	\$7.13	10
56021	Data Keyers, Composing	12	9	-3	-25.0%	-2.8%	0	0	0			10
65705	Data Processing Equipment Repairers	292	408	116	39.7%	3.4%	12	4	16	\$10.08	\$7.01	07
25103	Database Administrators	93	145	52	56.9%	4.5%	5	2	7	\$21.84	\$15.09	05
49034	Demonstrators & Promoters	480	870	180	38.7%	3.2%	18	13	31	\$8.80	\$5.86	10
86002	Dental Assistants	763	1,033	280	37.2%	3.2%	28	12	40	\$9.69	\$8.64	10
32908	Dental Hygienists	485	871	188	38.4%	3.3%	18	11	30	\$25.91	\$21.71	08
32105	Dentists	1,181	1,330	178	15.3%	1.4%	18	24	42	\$29.81	\$20.98	01
87914	Derrick Operators, Oil & Gas Extraction	138	183	45	32.8%	2.9%	5	3	8	\$12.02	\$10.45	10
34038	Designers, Except Interior Designers	1,346	1,607	282	19.5%	1.8%	28	20	48	\$9.10	\$8.40	05
63035	Detectives & Investigators, Except Public	125	178	51	40.8%	3.5%	5	3	8	\$9.12	\$8.76	08
32523	Dietetic Technicians	50	83	13	28.0%	2.3%	1	1	2	\$10.37	\$9.19	08
32521	Dietitians & Nutritionists	175	188	23	13.1%	1.2%	2	4	6	\$17.00	\$14.71	05
85014	Dining Room & Cafeteria Attendants & Bartender Helpers	1,181	1,270	109	9.4%	0.9%	11	36	48	\$5.75	\$5.53	11
27505	Directors, Religious Activities & Education	852	764	-112	-17.2%	1.8%	11	10	21	\$7.72	\$8.49	05
58006	Dispatchers, Except Police, Fire & Ambulance	498	815	119	24.0%	2.2%	12	8	20	\$11.29	\$7.43	10

*Numbers may not add due to rounding

** See explanation of training levels at end of table.

***NEC=Not Elsewhere Classified

Montana Occupational Job Projections, 1998 - 2008

Montana - Statewide - All Industries (Includes Self-Employed)

All Occupations - Listed Alphabetically

Occupational Code	Occupation	Job Estimates				Compounded Annual Growth Rate	Average Annual Openings			1998 Wages (Hourly)		Training Level** Required
		Base Year 1998	Projected Year 2008	Total Change	Total % Change		Due to Growth	Due to Replacements	Total Annual Openings*	Mean Wage	Entry Wage	
58002	Dispatchers: Police, Fire & Ambulance	603	644	41	8.6%	0.7%	4	10	14	\$9.60	\$7.82	10
22514	Drafters	638	748	108	16.9%	1.6%	11	15	26	\$13.47	\$10.85	07
97928	Dragline Operators	60	57	-3	-5.0%	-0.5%	0	1	1	\$20.84	\$18.93	10
97928	Dredge Operators	5	4	-1	-20.0%	-2.2%	0	0	0			10
91108	Drilling & Boring Machine Tool Setters & Set-Up Operators, Metal & Plastic	10	9	-1	-10.0%	-1.1%	0	0	0			10
97117	Driver/Sales Workers	1,225	1,252	27	2.2%	0.2%	3	24	27	\$9.19	\$5.80	11
97108	Drywall Installers	85	104	19	22.4%	2.0%	2	1	3	\$13.27	\$11.01	10
56005	Duplicating Machine Operators	188	177	11	6.6%	0.6%	1	5	6	\$8.47	\$6.50	11
87902	Earth Drillers, Except Oil & Gas	328	347	19	5.6%	0.6%	2	8	10	\$13.70	\$11.56	10
31233	Economics Teachers, Postsecondary	39	48	9	23.1%	2.1%	1	1	2			02
27102	Economists, Including Market Research Analysts	177	235	58	32.8%	2.9%	6	4	10	\$21.17	\$17.21	05
15005	Education Administrators	1,873	2,116	143	7.2%	0.7%	14	50	64	\$26.34	\$21.82	04
31252	Education Teachers, Postsecondary	167	209	42	25.1%	2.3%	4	5	9			02
85711	Electric Home Appliance & Power Tool Repairers	220	237	17	7.7%	0.8%	2	7	9	\$9.45	\$7.48	09
85911	Electric Meter Installers & Repairers	31	28	-5	-16.1%	-1.7%	-1	1	1	\$16.91	\$18.88	09
85714	Electric Motor, Transformer & Related Repairers	26	29	3	11.5%	1.1%	0	1	1			07
93905	Electrical & Electronic Assemblers	58	89	13	23.2%	2.1%	1	1	2			11
22505	Electrical & Electronic Engineering Technicians & Technologists	838	741	103	16.1%	1.5%	10	13	23	\$14.31	\$10.34	06
22126	Electrical & Electronic Engineers	307	380	73	23.8%	2.2%	7	7	14	\$21.54	\$15.62	05
93114	Electrical & Electronic Equipment Assemblers, Precision	106	101	-5	-4.7%	-0.5%	-1	2	2	\$7.33	\$5.98	08
85726	Electrical Installers & Repairers, Transportation Equipment	90	89	-1	-1.1%	-0.1%	0	2	2	\$15.24	\$11.66	07
85723	Electrical Power-Line Installers & Repairers	566	586	20	3.5%	0.4%	2	13	15	\$20.88	\$18.41	09
87202	Electricians	2,132	2,471	339	15.9%	1.5%	34	44	78	\$17.73	\$14.90	09
32928	Electrocardiograph Technicians	23	16	-7	-30.4%	-3.6%	-1	1	1			10
91917	Electrolytic Plating & Coating Machine Setters & Set-Up Operators, Metal & Plastic	8	7	1	16.7%	1.6%	0	0	0			10
93111	Electromechanical Equipment Assemblers, Precision	344	454	110	32.0%	2.8%	11	7	18			08
85808	Electromedical & Biomedical Equipment Repairers	53	60	7	13.2%	1.3%	1	1	2	\$15.35	\$12.41	09
32923	Electroneurodiagnostic Technologists	23	22	-1	-4.3%	-0.4%	0	1	1			10
85708	Electronic Home Entertainment Equipment Repairers	213	216	6	2.6%	0.3%	1	8	7	\$10.48	\$8.39	07
69707	Electronic Pagination System Operators	60	116	55	91.7%	8.7%	6	1	7	\$12.59	\$9.75	09
85717	Electronics Repairers, Commercial & Industrial Equipment	188	200	12	6.4%	0.6%	1	5	6	\$18.30	\$16.08	07
85932	Elevator Installers & Repairers	20	26	6	30.0%	2.7%	1	1	2			09
39014	Embalmers	80	62	12	15.0%	1.4%	1	2	3			10
32508	Emergency Medical Technicians	888	884	208	30.3%	2.7%	21	17	38	\$9.13	\$7.08	07
21508	Employment Interviewers, Private or Public Employment Service	338	351	13	3.8%	0.4%	1	9	10			05
31222	Engineering Teachers, Postsecondary	188	211	43	25.6%	2.3%	4	5	9			02
13017	Engineering, Mathematical & Natural Sciences Managers	485	887	202	41.6%	3.5%	20	8	28	\$26.58	\$22.12	04
31214	English Language & Literature Teachers, Postsecondary	434	543	109	25.1%	2.3%	11	12	23			02
93851	Engraving & Printing Workers, Hand	29	38	10	34.5%	3.0%	1	1	2			10
22517	Estimators & Drafters, Utilities	27	20	-7	-25.9%	-3.0%	-1	1	1			07
97923	Excavating & Loading Machine Operators	1,330	1,602	272	20.5%	1.8%	27	25	52	\$14.88	\$11.90	10
92971	Extruding, Forming, Pressing & Compacting Machine Operators & Tenders	136	150	14	10.3%	1.0%	1	3	4	\$10.76	\$7.87	10
92968	Extruding, Forming, Pressing & Compacting Machine Setters & Set-Up Operators	72	81	9	12.5%	1.2%	1	2	3	\$12.15	\$12.16	10
89502	Fabric & Apparel Patternmakers & Layout Workers	26	48	20	71.4%	5.5%	2	1	3	\$9.69	\$9.05	09

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Montana Occupational Job Projections, 1998 - 2008

Montana - Statewide - All Industries (Includes Self-Employed)

All Occupations - Listed Alphabetically

Occupational Code	Occupation	Job Estimates				Compounded Annual Growth Rate	Average Annual Openings			1998 Wages (Hourly)		Training Level** Required
		Base Year 1998	Projected Year 2008	Total Change	Total % Change		Due to Growth	Due to Replacements	Total Annual Openings*	Mean Wage	Entry Wage	
73002	Fallers & Buckers	1,983	2,189	186	9.4%	0.9%	19	50	69	\$17.56	\$15.72	11
31323	Farm & Home Management Advisors	209	228	19	9.1%	0.9%	2	2	4			05
85321	Farm Equipment Mechanics	428	483	37	8.7%	0.8%	4	11	15	\$10.88	\$9.47	09
79021	Farm Equipment Operators	37	39	2	6.4%	0.5%	0	1	1			11
79856	Farmworkers, Farm & Ranch Animals	2,964	1,954	-1,110	-37.4%	-4.8%	-111	91	91			11
79856	Farmworkers, Food & Fiber Crops	2,882	1,672	-990	-37.2%	-4.5%	-99	82	82			11
71002	Farmers/Ranchers Self-Employed	25,841	25,471	-170	-0.7%	-0.1%	-17	397	397			09
87817	Fence Erectors	118	154	38	32.8%	2.9%	4	3	7	\$8.90	\$7.19	10
55321	File Clerks	431	493	82	14.4%	1.4%	8	15	21	\$7.78	\$8.01	11
34032	Film Editors	139	165	18	11.6%	1.1%	2	4	6			05
25315	Financial Analysts, Statistical	30	34	4	13.3%	1.3%	0	0	0	\$17.29	\$10.73	05
13002	Financial Managers	1,478	1,803	327	22.2%	2.0%	33	23	58	\$24.10	\$17.22	04
81002	Fire Fighting & Prevention Supervisors	86	73	7	10.8%	1.0%	1	2	3	\$17.57	\$12.98	08
83002	Fire Inspectors	19	22	3	15.8%	1.5%	0	1	1			08
83008	Firefighters	909	960	61	5.8%	0.8%	5	22	27	\$16.00	\$13.09	09
81011	First-Line Superv. & Mngrs/Superv.: Transp. & Material-Moving Machine & Vehicle Operators	801	674	73	12.1%	1.2%	7	16	22	\$15.70	\$10.78	08
41002	First-Line Supervisors & Managers/Supervisors, Sales & Related Workers	18,275	19,274	2,999	16.4%	1.7%	300	213	613	\$14.45	\$9.97	08
72002	First-Line Supervisors & Managers/Supervisors: Agric., Forestry, Fishing & Related Workers	580	640	60	10.3%	1.0%	8	8	14	\$15.05	\$9.29	08
51002	First-Line Supervisors & Managers/Supervisors: Clerical & Administrative Support Workers	3,870	4,791	921	23.8%	2.2%	92	87	179	\$13.71	\$10.04	08
61006	First-Line Supervisors & Managers/Supervisors: Construction Trades & Extractive Workers	4,823	5,889	846	17.5%	1.8%	85	128	213	\$17.50	\$13.15	08
81017	First-Line Supervisors & Managers/Supervisors: Helpers/Laborers/Material Movers, Hand	238	272	38	16.3%	1.4%	4	8	10	\$15.47	\$11.58	08
81002	First-Line Supervisors & Managers/Supervisors: Mechanics, Installers & Repairers	1,388	1,551	165	11.9%	1.1%	17	41	58	\$18.82	\$13.52	08
81008	First-Line Supervisors & Managers/Supervisors: Production & Operating Workers	1,057	1,141	84	7.9%	0.8%	8	30	38	\$18.38	\$11.90	08
83041	Fish & Game Wardens	90	94	4	4.4%	0.4%	0	1	1			10
93108	Fitters, Structural Metal, Precision	23	22	-1	-4.3%	-0.4%	0	1	1			08
87605	Floor Layers, Except Carpet, Wood & Hard Tiles	4	5	1	25.0%	2.3%	0	0	0			10
89808	Food Batchmakers	84	97	13	15.5%	1.5%	1	3	4			10
85038	Food Preparation Workers	3,889	4,030	381	9.8%	0.9%	38	202	238	\$8.45	\$5.68	11
85011	Food Servers, Outside	265	355	70	24.8%	2.2%	7	24	31	\$8.63	\$5.74	11
15028	Food Service & Lodging Managers	2,912	3,329	417	14.3%	1.4%	42	51	93	\$13.24	\$10.31	08
31216	Foreign Language & Literature Teachers, Postsecondary	87	84	17	26.4%	2.3%	2	2	4			02
79002	Forest & Conservation Workers	944	938	-6	-0.6%	-0.1%	-1	21	21	\$13.07	\$9.68	11
83005	Forest Fire Inspectors & Prevention Specialists	22	24	2	9.1%	0.9%	0	1	1			08
24302	Foresters & Conservation Scientists	957	987	10	1.0%	0.1%	1	26	26	\$20.30	\$16.44	05
91914	Foundry Mold Assembly & Shake-Out Workers	3	4	1	33.3%	2.9%	0	0	0			10
86606	Frame Wires, Central Office	5	8	1	20.0%	1.8%	0	0	0			07
88041	Funeral Attendants	97	104	7	7.2%	0.7%	1	3	4	\$7.84	\$6.18	11
39011	Funeral Directors & Morticians	174	198	24	13.8%	1.3%	2	3	5	\$25.05	\$17.85	08
91935	Furnace Operators & Tenders	38	20	-18	-47.4%	-6.2%	-2	1	1			10
92923	Furnace, Kiln, Oven, Drier or Kettle Operators & Tenders	123	172	49	39.8%	3.4%	5	2	7	\$12.03	\$8.22	10
89314	Furniture Finishers	134	159	25	18.7%	1.7%	3	3	6	\$7.38	\$5.04	09
85944	Gas Appliance Repairers	98	106	7	7.1%	0.7%	1	3	4	\$14.10	\$10.39	09
79221	Gas Compressor Operators	34	33	-1	-2.9%	-0.3%	0	1	1	\$17.40	\$18.73	10
95005	Gas Plant Operators	38	33	-3	-8.3%	-0.9%	0	1	1			09

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Montana Occupational Job Projections, 1998 - 2008

Montana - Statewide - All Industries (Includes Self-Employed)

All Occupations - Listed Alphabetically

Occupational Code	Occupation	Job Estimates				Compounded Annual Growth Rate	Average Annual Openings			1998 Wages (Hourly)		Training Level** Required
		Base Year 1998	Projected Year 2008	Total Change	Total % Change		Due to Growth	Due to Replacements	Total Annual Openings*	Mean Wage	Entry Wage	
97917	Gas Pumping Station Operators	7	7	0	0.0%	0.0%	0	0	0			10
95017	Gaugers	37	25	-12	-32.4%	-3.8%	-1	1	1	\$18.20	\$14.15	09
19005	General Managers & Top Executives	8,906	8,410	1,504	21.8%	2.0%	150	121	271	\$25.93	\$16.27	04
55347	General Office Clerks	10,927	13,167	2,240	20.5%	1.9%	224	303	527	\$8.70	\$8.82	11
31234	Geography Teachers, Postsecondary	14	18	4	28.6%	2.5%	0	0	0			02
24111	Geologists, Geophysicists & Oceanographers	429	489	60	14.0%	1.3%	8	11	17	\$23.78	\$17.82	05
87811	Glaziers	237	272	35	14.8%	1.4%	4	6	10	\$11.42	\$7.76	09
97938	Grader, Bulldozer & Scraper Operators	914	1,202	288	31.5%	2.8%	29	7	36	\$14.99	\$12.55	10
79011	Graders & Sorters, Agricultural Products	72	60	8	11.1%	1.1%	1	2	3			11
31117	Graduate Assistants, Teaching	290	381	71	24.5%	2.2%	7	8	15			05
93953	Grinding & Polishing Workers, Hand	99	122	23	23.2%	2.1%	2	3	5	\$7.88	\$8.83	11
91114	Grinding/Lapping/Buffering Machine Tool Setters & Set-Up Operators, Metal & Plastic	12	13	1	8.3%	0.8%	0	0	0			10
83047	Guards & Watch Guards	1,880	2,599	738	38.7%	3.4%	74	46	120	\$7.46	\$5.86	11
66017	Guides	455	678	223	48.0%	4.1%	22	8	30	\$7.81	\$5.86	11
68005	Hairdressers, Hairstylists & Cosmetologists	4,338	4,727	391	9.0%	0.9%	38	112	151	\$7.02	\$5.73	07
89702	Hand Compositors & Typesetters	12	8	-4	-33.3%	-4.0%	0	0	0			09
98902	Hand Packers & Packers	2,131	2,879	746	35.1%	3.1%	75	53	128	\$8.88	\$5.73	11
87305	Hard Tile Setters	44	50	6	13.6%	1.3%	1	1	2			09
87803	Hazardous Materials Removal Workers	80	117	27	30.0%	2.7%	3	2	5	\$14.07	\$12.77	10
92305	Head Sawyers	82	55	-7	-11.3%	-1.2%	-1	2	2	\$12.99	\$11.64	10
31212	Health Assessment & Treatment Teachers, Postsecondary	80	88	28	46.7%	3.9%	3	2	5			02
31211	Health Diagnostics Teachers, Postsecondary	8	12	4	50.0%	4.1%	0	0	0			02
65902	Heating, Air Conditioning & Refrigeration Mechanics & Installers	857	830	173	28.3%	2.4%	17	12	29	\$14.38	\$10.47	09
98319	Helpers, All Other Construction Trades Workers - NEC***	384	434	70	19.2%	1.8%	7	17	24	\$8.93	\$7.51	11
98311	Helpers, Brick & Stonemasons & Hard Tile Setters	238	308	70	29.7%	2.8%	7	11	18	\$13.46	\$11.38	11
98312	Helpers, Carpenters & Related Workers	756	891	233	30.7%	2.7%	23	35	58	\$8.34	\$8.83	11
98313	Helpers, Electricians & Power-Line Transmission Installers	118	111	-7	-5.9%	-0.8%	-1	5	5	\$13.22	\$11.08	11
98323	Helpers, Extractive Workers	80	106	28	32.5%	2.8%	3	4	7	\$7.05	\$5.75	11
98102	Helpers, Mechanics & Repairs	800	984	184	23.0%	2.1%	18	38	54	\$8.54	\$6.51	11
98314	Helpers, Painters, Paperhangers, Plasterers & Stucco Masons	28	38	10	35.7%	3.1%	1	1	2	\$11.15	\$10.53	11
98315	Helpers, Plumbers, Pipefitters & Steamfitters	87	125	28	28.9%	2.8%	3	4	7	\$9.85	\$7.84	11
98318	Helpers, Roofers	42	58	16	38.1%	3.3%	2	2	4	\$8.48	\$7.27	11
87711	Highway Maintenance Workers	1,883	2,087	204	10.8%	1.0%	20	45	65	\$13.17	\$11.70	11
31235	History Teachers, Postsecondary	83	79	16	25.4%	2.3%	2	2	4			02
97941	Hoist & Winch Operators	25	24	-1	-4.0%	-0.4%	0	0	0			10
31282	Home Economics Teachers, Postsecondary	22	21	-1	-4.5%	-0.5%	0	1	1			02
66011	Home Health Aides	1,919	2,574	655	34.1%	3.0%	88	27	93	\$7.51	\$8.49	11
85002	Hosts & Hostesses: Restaurant, Lounge or Coffee Shop	803	712	109	18.1%	1.7%	11	18	29	\$5.88	\$5.58	11
53808	Hotel Desk Clerks	1,497	1,708	211	14.1%	1.3%	21	57	78	\$8.24	\$5.68	11
61005	Housekeeping Supervisors	442	484	42	9.5%	0.9%	4	10	14	\$8.88	\$6.87	08
27308	Human Services Workers	1,490	2,380	890	59.7%	4.8%	88	38	126	\$8.04	\$8.22	10
22508	Industrial Engineering Technicians & Technologists	27	31	4	14.8%	1.4%	0	1	1			08
22128	Industrial Engineers, Except Safety	80	128	48	60.0%	4.8%	5	1	6	\$23.06	\$17.50	05
15014	Industrial Production Managers	207	218	12	5.8%	0.8%	1	4	5	\$21.99	\$18.70	05

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Montana Occupational Job Projections, 1998 - 2008
Montana - Statewide - All Industries (Includes Self-Employed)
All Occupations - Listed Alphabetically

Occupational Code	Occupation	Job Estimates				Compounded Annual Growth Rate	Average Annual Openings			1998 Wages (Hourly)		Training Level** Required
		Base Year 1998	Projected Year 2008	Total Change	Total % Change		Due to Growth	Due to Replacements	Total Annual Openings*	Mean Wage	Entry Wage	
07947	Industrial Truck & Tractor Operators	922	1,005	83	9.0%	0.9%	8	11	19	\$11.51	\$9.15	11
05936	Installers & Repairers, Manufactured Buildings, Mobile Homes & Travel Trailers	189	244	55	29.1%	2.6%	6	4	10	\$9.44	\$7.48	09
31617	Instructional Coordinators	223	293	70	31.4%	2.8%	7	2	9	\$16.44	\$13.07	06
31321	Instructors & Coaches, Sports & Physical Training	1,898	2,390	492	25.9%	2.3%	49	20	69	\$9.37	\$5.75	10
31317	Instructors, Nonvocational Education	2,770	3,222	452	16.3%	1.5%	45	29	74	\$13.37	\$7.32	08
07802	Insulation Workers	280	308	28	9.3%	0.9%	3	9	12	\$12.14	\$10.85	10
53302	Insurance Adjusters, Examiners & Investigators	289	358	67	23.2%	2.1%	7	5	12	\$17.63	\$12.50	09
53306	Insurance Appraisers, Auto Damage	10	12	2	20.0%	1.8%	0	0	0			09
53311	Insurance Claims Clerks	493	585	92	18.7%	1.7%	9	8	17	\$9.64	\$7.88	10
53308	Insurance Examining Clerks	15	17	2	13.3%	1.3%	0	0	0			10
53314	Insurance Policy Processing Clerks	382	420	38	9.9%	1.0%	4	5	9	\$10.59	\$9.02	10
21102	Insurance Underwriters	189	201	12	6.3%	0.6%	1	5	6	\$14.65	\$11.34	05
34041	Interior Designers	320	380	60	18.8%	1.7%	6	5	11	\$13.83	\$10.31	05
65332	Interviewing Clerks, Except Personnel & Social Welfare	401	549	148	36.9%	3.2%	15	13	28	\$10.13	\$7.65	11
63505	Investigators, Clerical	8	8	0	0.0%	0.0%	0	0	0			11
07005	Janitors & Cleaners, Except Maids & Housekeeping Cleaners	9,034	9,780	728	8.0%	0.6%	73	198	269	\$7.65	\$5.98	11
09123	Jewelers & Silversmiths	155	164	9	5.8%	0.8%	1	4	5	\$11.04	\$10.02	07
09706	Job Printers	17	17	0	0.0%	0.0%	0	0	0			09
26102	Judges & Magistrates	223	228	5	2.3%	0.1%	0	3	3	\$18.21	\$8.53	04
79041	Laborers, Landscaping & Groundskeeping	2,637	3,649	1,012	38.4%	3.3%	101	79	180	\$7.94	\$6.16	11
22308	Landscape Architects	42	48	6	14.3%	0.9%	0	1	1	\$21.47	\$16.38	06
91105	Lathe & Turning Machine Tool Setters & Set-Up Operators, Metal & Plastic	19	24	5	26.3%	2.4%	1	0	1			10
07114	Lathers	8	7	-1	-12.5%	1.8%	0	0	0			10
92726	Laundry & Dry-Cleaning Machine Operators & Tenders, Except Pressing	1,084	1,250	166	15.3%	1.4%	17	27	44	\$6.99	\$5.84	10
26302	Law Clerks	161	162	1	0.6%	0.1%	0	2	2	\$12.96	\$11.40	06
31244	Law Teachers, Postsecondary	63	66	3	4.8%	2.2%	1	1	2			02
26108	Lawyers	3,555	4,140	585	16.5%	1.5%	59	39	98	\$27.48	\$17.61	01
31111	Lecturers	28	33	5	17.9%	1.7%	1	1	2			06
55102	Legal Secretaries	724	788	62	8.6%	0.8%	8	12	18	\$10.38	\$5.96	07
92616	Letterpress Setters & Set-Up Operators	11	9	-2	-18.2%	-2.0%	0	0	0			10
31502	Librarians, Professional	892	878	-14	-2.0%	-0.2%	-1	18	18	\$15.74	\$12.38	03
63002	Library Assistants & Bookmobile Drivers	553	647	94	17.0%	1.8%	9	27	36	\$7.54	\$5.98	11
31258	Library Science Teachers, Postsecondary	32	40	8	25.0%	2.3%	1	1	2			02
63708	License Clerks	433	479	46	10.6%	1.0%	5	7	12			11
32505	Licensed Practical Nurses	2,364	2,798	432	17.3%	1.8%	41	51	92	\$10.95	\$9.94	07
31202	Life Sciences Teachers, Postsecondary	198	268	70	35.4%	3.1%	7	5	12			02
97932	Loading Machine Operators, Underground Mining	29	23	-6	-20.7%	-2.3%	-1	1	1			10
63121	Loan & Credit Clerks	830	749	-119	-14.3%	1.8%	12	7	19	\$8.98	\$7.55	11
53111	Loan Interviewers	28	24	-2	-7.7%	-0.8%	0	0	0	\$9.99	\$8.82	11
21108	Loan Officers & Counselors	937	1,159	222	23.7%	2.2%	22	21	43	\$17.33	\$12.06	06
05923	Locksmiths & Safe Repairers	14	17	3	21.4%	2.0%	0	0	0			10
07305	Locomotive Engineers	688	888	200	29.1%	0.0%	0	41	41	\$25.22	\$18.56	08
79008	Log Graders & Scalers	27	27	0	0.0%	0.0%	0	1	1	\$14.11	\$12.71	11
73011	Logging Tractor Operators	240	238	-2	-0.8%	-0.1%	0	3	3	\$13.54	\$11.91	10

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Montana Occupational Job Projections, 1998 - 2008

Montana - Statewide - All Industries (Includes Self-Employed)

All Occupations - Listed Alphabetically

Occupational Code	Occupation	Job Estimates				Compounded Annual Growth Rate	Average Annual Openings			1998 Wages (Hourly)		Training Level** Required
		Base Year 1996	Projected Year 2006	Total Change	Total % Change		Due to Growth	Due to Replacements	Total Annual Openings*	Mean Wage	Entry Wage	
73008	Log-Handling Equipment Operators	442	464	22	5.0%	0.5%	2	11	13	\$14.16	\$12.33	10
93105	Machine Builders & Other Precision Machine Assemblers	11	15	4	36.4%	3.2%	0	0	0			06
98502	Machine Feeders & Offbearers	607	615	6	1.3%	0.1%	1	16	19	\$9.53	\$7.48	11
91321	Machine Forming Operators & Tenders, Metal & Plastic	34	41	7	20.6%	1.6%	1	1	2	\$8.63	\$6.67	10
91117	Machine Tool Cutting Operators & Tenders, Metal & Plastic	50	43	-7	-14.0%	-1.5%	-1	1	1	\$9.77	\$9.11	10
85110	Machinery Maintenance Mechanics	381	383	2	0.5%	0.1%	0	6	9	\$14.06	\$11.77	09
65118	Machinery Maintenance Mechanics, Water or Power Generation Plant	121	129	8	6.6%	0.6%	1	3	4	\$19.66	\$16.20	09
65125	Machinery Maintenance Workers	176	156	-23	-12.8%	-1.4%	-2	4	4	\$14.49	\$11.29	09
69106	Machinists	533	607	74	13.9%	1.3%	7	11	18	\$12.66	\$9.55	09
87002	Maid & Housekeeping Cleaners	5,119	5,852	843	16.5%	1.5%	84	95	179	\$8.26	\$5.63	11
57302	Mail Clerks, Except Mail Machine Operators & Postal Service	317	341	24	7.6%	0.7%	2	6	10	\$8.15	\$6.72	11
56008	Mail Machine Operators, Preparation & Handling	36	37	1	2.8%	0.3%	0	1	1	\$9.63	\$6.70	11
85132	Maintenance Repairers, General Utility	4,236	4,610	574	13.6%	1.3%	57	95	162	\$9.90	\$7.18	06
21905	Management Analysts	663	1,126	255	30.7%	2.7%	27	7	34	\$26.00	\$16.49	04
68008	Manicurists	38	40	2	5.3%	0.5%	0	1	1			07
13011	Marketing, Advertising & Public Relations Managers	758	985	197	25.7%	2.3%	20	11	31	\$22.61	\$15.85	04
58021	Marking Clerks	12	11	-1	-8.3%	-0.9%	0	0	0			11
31224	Mathematical Sciences Teachers, Postsecondary	165	232	47	28.4%	2.3%	5	5	10			02
25310	Mathematical Scientists	33	32	-1	-3.0%	-0.3%	0	0	0			02
25323	Mathematical Technicians	3	4	1	33.3%	2.9%	0	0	0			08
93938	Meat, Poultry & Fish Cutters & Trimmers, Hand	32	42	10	31.3%	2.8%	1	1	2	\$7.64	\$8.76	11
65926	Mechanical Control & Valve Installers & Repairers	284	244	-20	-7.6%	-0.8%	-2	7	7	\$21.74	\$17.86	09
22511	Mechanical Engineering Technicians & Technologists	56	54	-1	-1.6%	-0.2%	0	1	1	\$19.24	\$15.48	06
22135	Mechanical Engineers	297	391	94	31.6%	2.8%	8	8	15	\$21.17	\$15.56	05
32905	Medical & Clinical Laboratory Technicians	305	358	53	17.4%	1.6%	5	4	9	\$12.04	\$10.25	06
32902	Medical & Clinical Laboratory Technologists	483	516	26	5.3%	0.5%	3	6	9	\$17.82	\$14.61	05
89923	Medical Appliance Makers	42	48	6	14.3%	1.3%	1	1	2			09
66005	Medical Assistants	926	1,432	506	54.6%	4.5%	51	23	74	\$6.79	\$6.98	10
32911	Medical Records Technicians	425	588	163	38.4%	3.3%	16	10	26	\$9.45	\$7.48	08
24311	Medical Scientists	42	103	61	145.2%	6.4%	6	1	7			02
55105	Medical Secretaries	882	998	117	13.3%	1.3%	12	14	26	\$9.49	\$7.49	07
15008	Medicine & Health Services Managers	725	688	163	22.5%	2.1%	16	13	29	\$21.15	\$16.77	04
65956	Menders: Garments, Linens & Related	40	46	6	22.5%	2.1%	1	1	2	\$6.83	\$5.65	09
34044	Merchandise Displayers & Window Trimmers	134	146	12	9.0%	0.6%	1	2	3	\$7.47	\$6.04	10
57311	Messengers	213	261	48	22.5%	2.1%	5	5	10	\$7.20	\$5.77	11
91714	Metal Fabricators, Structural Metal Products	166	198	33	16.6%	1.6%	3	4	7	\$12.38	\$9.65	10
91911	Metal Molding, Coremaking & Casting Machine Operators & Tenders	26	19	-7	-26.9%	-3.1%	-1	1	1			10
93941	Metal Pourers & Casters, Basic Shapes	35	32	-3	-8.6%	-0.9%	0	1	1	\$7.14	\$5.87	10
22105	Metallurgists & Metallurgical, Ceramic & Materials Engineers	24	33	9	37.5%	3.2%	1	1	2			05
58014	Meter Readers, Utilities	233	217	-16	-6.9%	-0.7%	-2	6	6	\$11.94	\$8.58	11
91111	Milling & Planing Machine Setters & Set-Up Operators, Metal & Plastic	4	4	0	0.0%	0.0%	0	0	0			10
65123	Millwrights	486	484	-4	-0.6%	-0.1%	0	13	13	\$21.88	\$14.76	09
87943	Mine Cutting & Channeling Machine Operators	6	5	-1	-16.7%	-1.8%	0	0	0			09
22105	Mining Engineers, Including Mine Safety	60	86	6	7.5%	0.7%	1	2	3	\$27.00	\$22.64	05

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Montana Occupational Job Projections, 1998 - 2008

Montana - Statewide - All Industries (Includes Self-Employed)

All Occupations - Listed Alphabetically

Occupational Code	Occupation	Job Estimates				Compounded Annual Growth Rate	Average Annual Openings			1998 Wages (Hourly)		Training Level**
		Base Year 1998	Projected Year 2008	Total Change	Total % Change		Due to Growth	Due to Replacements	Total Annual Openings*	Mean Wage	Entry Wage	
15021	Mining, Quarrying & Oil & Gas Well Drilling Managers	40	38	-2	-5.0%	-0.5%	0	1	1	\$29.66	\$23.11	08
65314	Mobile Heavy Equipment Mechanics, Except Engines	981	1,167	186	19.0%	1.8%	19	26	45	\$16.44	\$13.28	09
93944	Molders & Casters, Hand	65	65	10	18.2%	1.7%	1	1	2			10
92906	Motion Picture Projectionists	136	105	-31	-22.6%	-2.6%	-3	3	3	\$7.07	\$8.04	11
97611	Motorboat Operators	7	6	1	14.3%	1.3%	0	0	0			10
85308	Motorcycle Repairers	163	167	24	14.7%	1.4%	2	4	6	\$9.61	\$7.47	09
53705	Municipal Clerks	115	130	15	13.0%	1.2%	2	2	4	\$10.75	\$9.35	11
34047	Music Directors, Singers, Composers & Related Workers	236	260	24	10.2%	1.0%	2	5	7			09
65921	Musical Instrument Repairers & Tuners	248	283	35	14.1%	1.3%	4	6	10			09
34051	Musicians, Instrumental	361	405	44	12.2%	1.2%	4	7	11			09
53105	New Accounts Clerks	420	538	116	27.6%	2.5%	12	14	26	\$8.28	\$7.32	06
32914	Nuclear Medicine Technologists	31	33	2	6.5%	0.6%	0	0	0	\$16.69	\$16.49	06
24506	Nuclear Technicians & Technologists	3	6	3	100.0%	7.2%	0	0	0			06
91502	Numerical Control Machine Tool Operators & Tenders, Metal & Plastic	20	29	9	45.0%	3.6%	1	0	1			10
15031	Nursery & Greenhouse Managers	7	6	-1	-14.3%	-1.5%	0	0	0			08
66008	Nursing Aides, Orderlies & Attendants	4,952	6,140	1,188	24.0%	2.2%	116	69	188	\$7.45	\$6.42	11
31114	Nursing Instructors, Postsecondary	157	197	40	25.6%	2.3%	4	3	7			03
32305	Occupational Therapists	231	265	54	23.4%	2.1%	6	3	8	\$22.42	\$18.14	05
66021	Occupational Therapy Assistants & Aides	140	216	76	54.3%	4.4%	8	3	11	\$10.42	\$7.70	06
65926	Office Machine & Cash Register Servicers	144	165	41	26.5%	2.5%	4	3	7	\$10.61	\$8.42	09
92512	Offset Lithographic Press Setters & Set-Up Operators	234	216	-16	-7.7%	-0.6%	-2	5	5	\$10.78	\$8.69	10
97906	Oil Pumpers, Except Wellhead	42	44	2	4.6%	0.5%	0	1	1			10
97956	Operating Engineers	1,352	1,481	129	9.5%	0.9%	13	24	37	\$14.73	\$11.60	10
25302	Operations & Systems Researchers & Analysts, Except Computer	38	47	9	23.7%	2.2%	1	1	2	\$21.93	\$18.97	03
32514	Opticians, Dispensing & Measuring	365	451	86	23.6%	2.1%	9	6	14	\$9.90	\$7.68	10
32108	Optometrists	386	443	55	14.2%	1.3%	8	6	14	\$30.03	\$18.26	01
56323	Order Clerks: Materials, Merchandise & Service	881	1,032	171	19.8%	1.6%	17	21	38	\$9.08	\$7.08	11
58026	Order Fillers, Wholesale & Retail Sales	557	700	143	25.7%	2.3%	14	13	27	\$9.15	\$6.77	11
92974	Packaging & Filling Machine Operators & Tenders	892	777	-85	-12.3%	1.2%	9	16	27	\$8.90	\$6.79	10
67402	Painters & Paperhangers, Construction & Maintenance	2,619	3,321	502	17.6%	1.7%	50	72	122	\$14.07	\$10.72	10
92947	Painters, Transportation Equipment	451	612	61	13.6%	1.3%	8	10	16	\$12.31	\$9.68	10
93947	Painting, Coating & Decorating Workers, Hand	203	252	49	24.1%	2.2%	5	5	10	\$9.48	\$7.54	11
92914	Paper Goods Machine Setters & Set-Up Operators	13	13	0	0.0%	0.0%	0	0	0			10
26305	Paralegal Personnel	600	911	311	51.8%	4.3%	31	5	36	\$13.57	\$12.06	08
63021	Parking Enforcement Officers	72	62	10	13.9%	1.3%	1	1	2	\$8.95	\$8.26	11
97808	Parking Lot Attendants	68	65	17	25.0%	2.3%	2	1	3	\$6.66	\$5.74	11
31258	Parks, Recreation, Leisure & Fitness Studies Teachers, Postsecondary	97	148	51	62.6%	4.3%	5	3	8			02
69706	Paste-Up Workers	39	21	-16	-46.2%	-6.0%	-2	1	1	\$10.39	\$8.71	09
69114	Pattern & Model Makers, Metal	3	4	1	33.3%	2.9%	0	0	0			09
69305	Pattern Makers, Wood	47	55	6	17.0%	1.6%	1	1	2			09
67708	Paving, Surfacing & Tamping Equipment Operators	221	260	39	17.6%	1.6%	4	6	10	\$12.32	\$10.50	10
65341	Payroll & Timekeeping Clerks	488	479	-9	-1.6%	-0.2%	-1	10	10	\$10.51	\$8.69	11
56014	Peripheral EDP Equipment Operators	47	33	-14	-29.8%	-3.5%	-1	1	1	\$9.45	\$7.60	10
58035	Personal & Home Care Aides	2,026	2,746	720	35.5%	3.1%	71	63	125	\$8.22	\$5.85	11

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Montana Occupational Job Projections, 1998 - 2008

Montana - Statewide - All Industries (Includes Self-Employed)

All Occupations - Listed Alphabetically

Occupational Code	Occupation	Base Year 1998	Job Estimates Projected Year 2008	Total Change	Total % Change	Compounded Annual Growth Rate	Average Annual Openings Due to Growth	Due to Replacements	Total Annual Openings*	1998 Mean Wage	Entry Wage	Training Level**
55314	Personnel Clerks, Except Payroll & Timekeeping	284	285	11	3.9%	0.4%	1	5	6	\$11.40	\$9.22	11
13005	Personnel, Training & Labor Relations Managers	341	409	88	19.8%	1.8%	7	8	15	\$22.01	\$15.76	04
21511	Personnel, Training & Labor Relations Specialists	879	955	78	8.8%	0.8%	8	23	31	\$15.98	\$13.33	05
67008	Pest Controllers & Assistants	44	53	9	20.5%	1.8%	1	1	2	\$10.26	\$8.43	10
22111	Petroleum Engineers	44	55	11	25.0%	2.3%	1	1	2	\$28.78	\$21.81	05
85014	Petroleum Refinery & Control Panel Operators	187	152	-15	-8.0%	-0.8%	-2	5	5			09
24511	Petroleum Technicians & Technologists	35	42	7	20.0%	1.6%	1	1	2	\$15.45	\$12.84	08
32517	Pharmacists	783	793	30	3.8%	0.4%	3	21	24	\$23.88	\$19.53	01
86028	Pharmacy Aides	137	158	19	13.9%	1.3%	2	3	5			11
32518	Pharmacy Technicians	214	246	32	15.0%	1.4%	3	5	8			19
31254	Philosophy & Religion Teachers, Postsecondary	28	38	7	24.1%	2.2%	1	1	2			02
88712	Photoengravers	10	5	-5	-50.0%	-6.7%	-1	0	0			09
92545	Photoengraving & Lithographing Machine Operators & Tenders	7	8	-1	-14.3%	-1.5%	0	0	0			10
34023	Photographers	322	383	81	18.8%	1.8%	8	5	11	\$10.35	\$8.99	07
92908	Photographic Processing Machine Operators & Tenders	234	219	-15	-6.4%	-0.7%	-2	9	9	\$9.38	\$7.05	11
86017	Physical & Corrective Therapy Assistants & Aides	283	405	123	43.5%	3.7%	12	7	19	\$9.98	\$7.32	08
32308	Physical Therapists	728	917	189	28.0%	2.3%	19	11	30	\$24.40	\$20.91	03
32102	Physicians and Surgeons	1,838	2,279	441	24.0%	2.2%	44	29	73	\$53.91	\$53.48	01
32511	Physician's Assistants	186	277	91	48.9%	4.1%	9	3	12	\$28.87	\$21.81	05
24192	Physicists & Astronomers	7	8	1	14.3%	1.3%	0	0	0			02
31208	Physical Teachers, Postsecondary	46	58	12	26.1%	2.4%	1	1	2			02
87705	Pile-Driver Operators	5	5	0	0.0%	0.0%	0	0	0			10
87508	Pipelayers	59	72	13	22.0%	2.0%	1	1	2	\$14.49	\$11.54	10
87317	Plasterers & Stucco Masons	18	26	7	38.8%	3.2%	1	0	1			09
91905	Plastic Molding & Casting Machine Operators & Tenders	38	31	-8	-20.5%	-2.3%	-1	1	1	\$8.01	\$6.72	10
91902	Plastic Molding & Casting Machine Setters & Set-Up Operators	17	21	4	23.5%	2.1%	0	0	0			10
89718	Platemakers	9	11	2	22.2%	2.0%	0	0	0			09
87502	Plumbers, Pipefitters & Steamfitters	1,881	1,985	304	16.1%	1.7%	39	21	51	\$17.35	\$13.01	09
32111	Podiatrists	37	41	4	10.8%	1.0%	0	1	1			01
81005	Police & Detective Supervisors	235	281	28	11.1%	1.1%	3	7	10	\$18.80	\$14.83	08
83011	Police Detectives	132	183	31	23.5%	2.1%	3	4	7	\$17.31	\$15.84	08
83014	Police Patrol Officers	809	1,038	238	29.5%	2.8%	24	21	45	\$14.01	\$11.68	09
31236	Political Science Teachers, Postsecondary	25	32	7	28.0%	2.5%	1	1	2			02
93928	Portable Machine Cutters	5	8	1	20.0%	1.8%	0	0	0			11
57305	Postal Mail Carriers	892	941	49	5.5%	0.5%	5	25	30	\$15.89	\$13.89	11
57308	Postal Service Clerks	127	131	4	3.1%	0.3%	0	2	2			11
15002	Postmasters & Mail Superintendents	284	289	5	1.8%	0.2%	1	5	6	\$19.21	\$18.16	08
95028	Power Distributors & Dispatchers	35	32	-3	-6.5%	-0.9%	0	1	1	\$28.33	\$25.35	09
95021	Power-Generating Plant Operators, Except Auxiliary Equipment Operators	28	28	0	0.0%	0.0%	0	1	1			09
85721	Powerhouse, Substation & Relay Electricians	13	12	-1	-7.7%	-0.8%	0	0	0			09
89921	Precision Dental Laboratory Technicians	387	344	-23	-6.3%	-0.7%	-2	7	7			09
89911	Precision Detail Design Decorators & Painters	88	95	7	8.0%	0.8%	1	2	3	\$7.14	\$8.09	09
89902	Precision Foundry Mold & Coremakers	28	34	8	30.8%	2.7%	1	1	2			09
89128	Precision Hand Workers, Jewelry & Related Products	12	7	-5	-41.7%	-5.3%	-1	0	0			09

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Montana Occupational Job Projections, 1998 - 2008

Montana - Statewide - All Industries (Includes Self-Employed)

All Occupations - Listed Alphabetically

Occupational Code	Occupation	Job Estimates				Compounded Annual Growth Rate	Average Annual Openings			1998 Wages (Hourly)		Training Level** Required
		Base Year 1996	Projected Year 2006	Total Change	Total % Change		Due to Growth	Due to Replacements	Total Annual Openings*	Mean Wage	Entry Wage	
83002	Precision Inspectors, Testers & Graders	72	103	31	43.1%	3.7%	3	1	4	\$13.35	\$10.71	08
89105	Precision Instrument Makers	9	11	2	22.2%	2.0%	0	0	0			09
86906	Precision Instrument Repairers	51	52	1	2.0%	0.2%	0	1	1	\$17.04	\$10.17	09
89117	Precision Layout Workers, Metal	19	23	4	21.1%	1.9%	0	0	0			09
89906	Precision Molders, Shapers, Casters & Carvers, Except Jewelry & Foundry	43	41	-2	-4.7%	-0.5%	0	1	1	\$12.11	\$7.74	09
89917	Precision Optical Goods Workers	29	48	17	58.6%	4.7%	2	0	2			09
89914	Precision Photographic Process Workers	77	72	-5	-6.5%	-0.7%	-1	3	3	\$9.97	\$7.03	10
91305	Press & Press-Break Machine Setters & Set-Up Operators, Metal & Plastic	20	25	5	25.0%	2.3%	1	0	1			10
89517	Pressers, Delicate Fabrics	36	43	7	19.4%	1.6%	1	1	2			09
93921	Pressers, Hand	31	40	9	29.0%	2.6%	1	1	2	\$7.57	\$8.79	11
92725	Pressing Machine Operators & Tenders: Textile, Garment & Related Materials	142	163	21	14.8%	1.4%	2	2	4	\$6.77	\$5.00	10
92543	Printing Press Machine Operators & Tenders	137	157	20	14.6%	1.4%	2	3	5	\$10.66	\$7.03	10
56326	Procurement Clerks	313	280	-23	-7.3%	-0.6%	-2	5	5	\$9.11	\$7.27	11
34056	Producers, Directors, Actors & Other Entertainers	443	582	139	31.4%	2.6%	14	10	24			09
83005	Production Inspectors, Testers, Graders, Sorters, Samplers & Weighers	470	460	-10	-2.1%	-0.2%	-1	11	11	\$12.87	\$10.71	08
58008	Production, Planning & Expediting Clerks	358	406	50	14.0%	1.3%	5	4	9	\$12.07	\$8.12	11
25111	Programmers, Numerical Tool & Process Control	10	12	2	20.0%	1.6%	0	0	0			08
53911	Proofreaders & Copy Markers	27	27	0	0.0%	0.0%	0	1	1			11
15011	Property & Real Estate Managers & Administrators	684	609	-75	-10.9%	-1.7%	13	9	22	\$10.66	\$8.69	05
79033	Pruners	6	10	2	25.0%	2.3%	0	0	0			11
68014	Psychiatric Aides	32	31	-1	-3.1%	-0.3%	0	0	0			11
32931	Psychiatric Technicians	158	173	15	9.5%	0.9%	2	2	4	\$9.95	\$6.91	07
27108	Psychologists	1,170	1,355	185	15.8%	1.5%	19	22	41	\$19.14	\$14.99	03
31237	Psychology Teachers, Postsecondary	41	52	11	26.8%	2.4%	1	1	2			02
19002	Public Administration Chief Executives, Legislators & General Administrators	401	415	14	3.5%	0.3%	1	10	11	\$12.80	\$8.16	04
34005	Public Relations Specialists & Publicity Writers	795	953	158	19.9%	1.6%	16	21	37	\$14.09	\$10.88	05
97953	Pump Operators	84	72	-12	-14.3%	-1.2%	1	1	2	\$12.72	\$9.88	10
91302	Punching Machine Setters & Set-Up Operators, Metal & Plastic	28	31	3	10.7%	0.7%	0	1	1			10
21305	Purchasing Agents & Buyers, Farm Products	162	201	39	24.1%	1.0%	2	5	7	\$16.67	\$11.45	05
21308	Purchasing Agents, Except Wholesale, Retail & Farm Products	478	541	63	13.2%	1.3%	8	12	18	\$16.72	\$12.08	05
13008	Purchasing Managers	307	334	27	8.8%	0.6%	3	7	10	\$15.47	\$14.14	04
32913	Radiation Therapists	27	30	3	11.1%	1.1%	0	0	0	\$19.83	\$17.95	06
85514	Radio Mechanics	32	27	-5	-15.6%	-1.7%	-1	1	1	\$11.97	\$9.81	07
39008	Radio Operators	60	100	20	25.0%	2.3%	2	2	4	\$9.10	\$7.25	10
32910	Radiologic Technologists	629	748	119	16.9%	1.6%	12	9	21	\$15.31	\$11.71	06
85317	Rail Car Repairers	15	20	5	33.3%	2.9%	1	0	1			09
97308	Rail Yard Engineers, Dinkey Operators & Hostlers	123	63	-60	-48.8%	-6.5%	-6	4	4	\$17.78	\$14.76	08
93038	Railroad & Transit Police & Special Agents	13	11	-2	-15.4%	-1.7%	0	0	0			09
97317	Railroad Brake, Signal & Switch Operators	52	27	-25	-48.1%	-6.3%	-3	2	2			08
97302	Railroad Conductors & Yardmasters	536	507	-29	-5.4%	-0.6%	-3	18	18			08
97714	Rail-Track Laying & Maintenance Equipment Operators	195	153	-42	-21.5%	-2.4%	-4	5	6	\$17.64	\$14.87	10
53014	Real Estate Clerks	114	150	36	31.6%	2.6%	4	3	7	\$8.40	\$8.04	11
55305	Receptionists & Information Clerks	3,702	4,660	958	25.9%	2.3%	96	71	167	\$7.68	\$8.28	11
27311	Recreation Workers	1,043	1,295	252	24.2%	2.2%	25	26	53	\$8.65	\$5.98	06

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Montana Occupational Job Projections, 1998 - 2008

Montana - Statewide - All Industries (Includes Self-Employed)

All Occupations - Listed Alphabetically

Occupational Code	Occupation	Job Estimates				Compounded Annual Growth Rate	Average Annual Openings			1998 Wages (Hourly)		Training Level** Required
		Base Year 1996	Projected Year 2006	Total Change	Total % Change		Due to Growth	Due to Replacements	Total Annual Openings*	Mean Wage	Entry Wage	
32317	Recreational Therapists	88	99	11	12.5%	1.2%	1	1	2	\$13.08	\$10.30	05
98705	Refuse & Recyclable Material Collectors	356	389	33	9.3%	0.9%	3	14	17	\$10.43	\$7.32	11
32502	Registered Nurses	6,850	8,148	1,298	18.9%	1.8%	130	113	243	\$18.78	\$14.19	06
34011	Reporters & Correspondents	453	509	56	12.4%	1.2%	6	14	20	\$12.37	\$8.09	05
53805	Reservation & Transportation Ticket Agents	281	257	-24	-1.5%	-0.2%	0	5	5	\$11.59	\$8.05	11
27307	Residential Counselors	1,079	1,452	373	34.8%	3.0%	37	25	62	\$8.51	\$8.64	05
32302	Respiratory Therapists	217	328	112	51.8%	4.3%	11	3	14	\$13.71	\$11.81	08
92921	Roasting, Baking & Drying Machine Operators & Tenders, Food & Tobacco	20	21	1	5.0%	0.5%	0	0	0			10
87923	Roof Bolters	12	8	-4	-33.3%	-4.0%	0	0	0			10
87808	Roofers	924	1,109	185	20.0%	1.8%	19	32	51	\$11.38	\$9.44	10
87911	Rotary Drill Operators, Oil & Glass Extraction	88	81	-7	-7.9%	-1.8%	1	2	3	\$17.23	\$18.52	10
87921	Routabouts	157	160	3	1.9%	0.2%	0	4	4	\$10.50	\$9.41	11
22132	Safety Engineers, Except Mining	45	51	6	13.3%	1.3%	1	1	2	\$22.94	\$16.28	05
43002	Sales Agents & Placers, Insurance	2,341	2,532	191	8.2%	1.2%	29	53	82	\$17.28	\$10.88	05
43023	Sales Agents, Advertising	789	930	141	17.9%	1.7%	14	22	36	\$12.85	\$8.60	10
43008	Sales Agents, Real Estate	2,493	2,887	394	15.8%	1.4%	37	50	87	\$18.54	\$10.48	07
43017	Sales Agents, Selected Business Services	865	1,170	305	35.3%	3.1%	31	18	49	\$13.37	\$9.10	10
43014	Sales Agents: Securities, Commodities & Financial Services	947	1,245	298	31.5%	2.8%	30	7	37	\$30.18	\$17.60	05
49002	Sales Engineers	24	30	6	25.0%	2.3%	1	0	1			05
49008	Sales Representatives, Except Retail & Scientific & Related Products & Services	3,978	4,570	592	14.9%	1.4%	59	97	156	\$18.25	\$11.18	10
49005	Sales Representatives, Scientific & Related Products & Services, Except Retail	819	950	131	16.0%	1.5%	13	20	33	\$20.25	\$18.05	10
49014	Salespersons, Parts	1,198	1,322	124	10.4%	1.0%	12	34	46	\$10.94	\$8.07	10
49011	Salespersons, Retail	18,887	19,977	1,090	5.8%	1.7%	311	572	883	\$8.84	\$8.04	11
92308	Sawing Machine Operators & Tenders	531	483	-48	-9.0%	-0.9%	-5	18	13	\$11.01	\$9.38	10
92302	Sawing Machine Setters & Set-Up Operators	70	85	15	21.4%	2.0%	2	2	4	\$12.83	\$11.82	10
91102	Sawing Machine Tool Setters & Set-Up Operators, Metal & Plastic	3	4	1	33.3%	2.9%	0	0	0			10
89715	Scanner Operators	5	5	0	0.0%	0.0%	0	0	0			09
92524	Screen Printing Machine Setters & Set-Up Operators	47	60	13	27.7%	2.5%	1	1	2	\$8.72	\$7.32	10
55108	Secretaries, Except Legal or Medical	7,610	7,669	59	1.0%	0.1%	6	124	132	\$9.01	\$7.18	10
92982	Separating, Filtering, Clarifying, Precipitating & Still Machine Operators & Tenders	88	73	-15	-17.0%	-1.9%	-2	2	2	\$12.34	\$10.64	10
87511	Septic Tank Servicers & Sewer Pipe Cleaners	39	48	9	23.1%	1.7%	1	1	2	\$13.03	\$11.54	10
97905	Service Station Attendants	589	859	270	45.8%	1.5%	9	25	34	\$7.28	\$8.17	11
87917	Service Unit Operators	109	120	11	10.1%	1.0%	1	3	4	\$15.80	\$11.88	10
93923	Sewers, Hand	5	4	-1	-20.0%	-2.2%	0	0	0			11
92717	Sewing Machine Operators, Garment	234	278	44	18.8%	1.7%	4	3	7	\$7.13	\$5.83	10
92721	Sewing Machine Operators, Nongarment	185	213	28	15.1%	1.4%	3	3	6	\$7.93	\$8.45	10
91308	Shear & Blitter Machine Setters & Set-Up Operators, Metal & Plastic	7	8	1	14.3%	1.3%	0	0	0			10
87805	Sheet Metal Duct Installers	127	189	62	48.8%	4.1%	8	3	9	\$14.43	\$10.02	10
89132	Sheet Metal Workers	440	560	120	27.3%	2.8%	14	11	25	\$15.80	\$10.11	10
83032	Sheriffs & Deputy Sheriffs	727	988	261	35.9%	3.1%	28	7	33	\$15.08	\$12.24	08
58028	Shipping, Receiving & Traffic Clerks	2,147	2,303	156	7.3%	0.7%	18	36	52	\$11.35	\$7.06	11
89511	Shoe & Leather Workers & Repairs, Precision	9	7	-2	-22.2%	-2.5%	0	0	0			09
97935	Shuttle Car Operators	6	5	-1	-16.7%	-1.8%	0	0	0			10
85511	Signal or Track Switch Maintainers	39	35	-4	-10.3%	-1.1%	0	1	1			09

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Montana Occupational Job Projections, 1998 - 2008

Montana - Statewide - All Industries (Includes Self-Employed)

All Occupations - Listed Alphabetically

Occupational Code	Occupation	Job Estimates				Compounded Annual Growth Rate	Average Annual Openings			1998 Wages (Hourly)		Training Level**
		Base Year 1998	Projected Year 2008	Total Change	Total % Change		Due to Growth	Due to Replacements	Total Annual Openings*	Mean Wage	Entry Wage	
89802	Slaughterers & Butchers	117	131	14	12.0%	1.1%	1	3	4	\$9.51	\$8.85	10
85328	Small Engine Specialists	238	311	73	30.7%	2.7%	7	8	13	\$9.68	\$7.79	09
31247	Social Work Teachers, Postsecondary	266	358	72	25.2%	2.3%	7	8	15			02
27305	Social Workers, Except Medical & Psychiatric	1,735	2,229	494	28.5%	2.6%	49	23	72	\$12.47	\$9.87	05
27302	Social Workers, Medical & Psychiatric	839	1,218	377	44.9%	3.6%	38	11	49	\$14.04	\$11.31	03
93917	Solderers & Brazers	6	12	4	50.0%	4.1%	0	0	0			11
21505	Special Agents, Insurance	100	103	3	3.0%	0.3%	0	3	3	\$15.87	\$9.88	05
32314	Speech-Language Pathologists & Audiologists	434	560	128	29.0%	2.8%	13	7	20	\$18.55	\$15.33	03
89514	Spotters, Dry-Cleaning	31	38	5	18.1%	1.5%	1	1	2			10
79036	Sprayers/Applicators	113	148	35	31.0%	2.7%	4	3	7	\$8.38	\$8.31	10
53128	Statement Clerks	74	80	-14	-18.9%	-2.1%	-1	1	1	\$8.75	\$8.23	11
85726	Station Installers & Repairers, Telephone	82	51	-11	-17.7%	-1.8%	-1	2	2	\$21.59	\$21.03	07
95032	Stationary Engineers	113	102	-11	-9.7%	-1.0%	-1	2	2	\$17.48	\$14.11	09
55328	Statistical Clerks	81	75	-6	-7.4%	-0.8%	-1	1	1	\$10.87	\$8.23	10
25312	Statisticians	158	251	93	58.9%	4.7%	9	2	11	\$20.96	\$15.07	03
55302	Stanographers and/or Court Reporters	314	337	23	7.3%	0.7%	2	5	7	\$11.47	\$8.17	07
49021	Stock Clerks, Sales Floor	3,558	3,560	2	0.1%	0.0%	0	54	54	\$7.37	\$5.99	11
58023	Stock Clerks, Stockroom, Warehouse or Storage Yard	1,818	1,855	239	14.8%	1.4%	24	24	48	\$8.69	\$8.20	11
87305	Stonemasons	25	32	7	28.0%	2.5%	1	1	2			09
89717	Strippers	13	11	-2	-15.4%	-1.7%	0	0	0			09
87814	Structural Metal Workers	143	173	30	21.0%	1.8%	3	4	7	\$16.83	\$15.57	09
32928	Surgical Technologists & Technicians	218	298	78	35.8%	3.1%	8	5	13	\$11.15	\$9.94	07
22621	Surveying & Mapping Technicians	377	455	78	20.7%	1.6%	8	9	17	\$13.21	\$10.41	10
22311	Surveyors & Mapping Scientists	312	328	17	5.4%	0.5%	2	7	9	\$16.93	\$13.42	05
57102	Switchboard Operators	542	528	-16	-3.0%	-0.3%	-2	12	12	\$7.32	\$5.93	11
25102	Systems Analysts, Electronic Data Processing	798	1,537	739	92.8%	8.8%	74	5	79	\$19.58	\$13.57	05
87111	Tapers	106	125	17	15.7%	1.5%	2	1	3			10
21814	Tax Examiners, Collectors & Revenue Agents	289	303	14	4.8%	0.5%	1	8	7			05
21111	Tax Preparers	242	298	58	23.1%	2.1%	8	5	11	\$13.12	\$7.85	10
97114	Taxi Drivers & Chauffeurs	791	971	180	22.8%	2.1%	18	13	31	\$8.49	\$5.83	11
53905	Teacher Aides & Educational Assistants, Clerical	1,729	2,088	357	20.8%	1.9%	36	20	56	\$7.25	\$6.06	11
31521	Teacher Aides, Paraprofessional	2,706	3,288	558	20.8%	1.9%	58	31	87	\$7.97	\$6.54	11
31314	Teachers & Instructors, Vocational Education & Training	915	993	78	8.5%	0.8%	8	10	18	\$19.93	\$13.10	08
31306	Teachers, Elementary School	8,940	8,989	29	0.4%	0.0%	3	160	183			05
31304	Teachers, Kindergarten	403	408	3	0.7%	0.1%	0	9	9			05
31303	Teachers, Preschool	1,167	1,620	453	38.8%	3.3%	45	25	70	\$8.88	\$8.45	05
31308	Teachers, Secondary School	4,687	4,687	0	0.0%	0.0%	0	201	201			05
31311	Teachers, Special Education	1,267	1,516	259	20.6%	1.8%	28	11	37			05
31505	Technical Assistants, Library	214	248	34	15.9%	1.5%	3	8	9	\$9.58	\$7.48	11
34005	Technical Writers & Editors	82	119	37	45.1%	3.8%	4	2	6	\$14.28	\$10.66	05
57111	Telegraph & Teletype Operators	5	5	0	0.0%	0.0%	0	0	0			10
49028	Telemarketers, Door-to-Door Sales Workers, News & Street Vendors, Other Related	2,619	3,108	587	23.3%	2.1%	59	85	124	\$8.11	\$8.22	10
85702	Telephone & Cable TV Line Installers & Repairers	353	574	221	62.8%	5.0%	22	11	33	\$18.18	\$10.00	09
53102	Tellers	1,898	2,065	169	8.9%	0.8%	17	81	98	\$7.46	\$6.52	11

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Montana Occupational Job Projections, 1998 - 2008

Montana - Statewide - All Industries (Includes Self-Employed)

All Occupations - Listed Alphabetically

Occupational Code	Occupation	Job Estimates				Compounded Annual Growth Rate	Average Annual Openings			1998 Wages (Hourly)		Training Level** Required
		Base Year 1998	Projected Year 2008	Total Change	Total % Change		Due to Growth	Due to Replacements	Total Annual Openings*	Mean Wage	Entry Wage	
92705	Textile Machine Operators & Tenders, Winding/Twisting/Knitting/Weaving/Cutting	10	6	-2	-20.0%	-2.2%	0	0	0			10
65953	Tire Repairers & Changers	498	554	56	11.2%	1.1%	0	22	28	\$8.81	\$6.85	11
28311	Title Examiners & Abstractors	470	553	83	17.7%	1.6%	6	4	12	\$12.90	\$11.23	10
28308	Title Searchers	54	68	14	25.8%	2.3%	1	0	1	\$8.83	\$7.62	10
89102	Tool & Die Makers	12	15	3	25.0%	2.3%	0	0	0			09
89111	Tool Grinders, Filers, Sharpeners & Other Precision Grinders	153	144	-9	-5.9%	-0.6%	-1	4	4	\$10.99	\$8.11	09
39005	Traffic Technicians	25	26	1	4.0%	0.4%	0	1	1			10
53108	Transit Clerks	4	3	-1	-25.0%	-2.8%	0	0	0			11
56011	Transportation Agents	117	130	13	11.1%	1.1%	1	1	2	\$11.68	\$8.48	11
68028	Transportation Attendants, Except Flight Attendants & Baggage Porters	298	216	-80	-26.8%	-3.1%	-8	8	6			11
83006	Transportation Inspectors	82	63	-9	-9.8%	-1.0%	-1	2	2			08
43021	Travel Agents	598	651	53	8.9%	0.8%	5	13	18	\$10.62	\$8.33	07
53802	Travel Clerks	35	38	3	8.6%	0.8%	0	1	1	\$8.22	\$6.88	11
97102	Truck Drivers, Heavy or Tractor-Trailer	8,633	10,367	1,734	20.1%	1.6%	173	124	297	\$13.54	\$10.71	11
97105	Truck Drivers, Light, Including Delivery & Route Workers	5,517	6,779	1,262	22.9%	2.1%	126	78	205	\$8.61	\$8.23	11
92541	Typesetting & Composing Machine Operators & Tenders	50	22	-28	-56.0%	-7.9%	-3	1	1	\$8.61	\$8.46	10
65307	Typists, Including Word Processing	499	428	-70	-14.0%	-1.5%	-7	10	10	\$9.18	\$7.18	10
69508	Upholsterers	137	170	33	24.1%	2.2%	3	3	6	\$8.75	\$6.44	09
27105	Urban & Regional Planners	184	204	20	10.8%	1.0%	2	4	6	\$15.42	\$13.76	03
68021	Ushers, Lobby Attendants & Ticket Takers	137	161	44	32.1%	2.8%	4	3	7	\$5.58	\$5.50	11
98905	Vehicle Washers & Equipment Cleaners	1,323	1,681	338	25.5%	2.3%	34	42	76	\$6.60	\$5.64	11
32114	Veterinarians & Veterinary Inspectors	527	643	116	22.0%	2.0%	12	11	23	\$21.77	\$18.82	01
79806	Veterinary Assistants	158	211	55	35.3%	3.1%	6	2	8	\$6.50	\$5.81	11
32951	Veterinary Technicians & Technologists	166	200	34	20.5%	1.9%	3	4	7	\$8.07	\$8.22	08
31514	Vocational & Educational Counselors	705	830	125	17.7%	1.7%	13	16	29	\$14.21	\$10.63	03
65008	Waiters & Waitresses	6,068	9,159	1,061	13.1%	1.2%	108	446	552	\$5.73	\$5.53	11
68032	Wardrobe & Locker & Dressing Room Attendants	3	4	1	33.3%	2.9%	0	0	0			11
95002	Water & Liquid Waste Treatment Plant & System Operators	377	427	50	13.3%	1.3%	6	8	14	\$13.05	\$10.58	09
68017	Weighers, Measurers, Checkers & Samplers - Recordkeeping	28	32	4	14.3%	1.3%	0	1	1	\$9.11	\$8.72	11
93914	Welders & Cutters	1,111	1,216	107	9.6%	0.8%	11	26	39	\$13.81	\$9.94	09
91706	Welding Machine Operators & Tenders	45	44	-1	-2.2%	-0.2%	0	1	1	\$12.22	\$10.54	10
91702	Welding Machine Setters & Set-Up Operators	10	13	3	30.0%	2.7%	0	0	0			10
53502	Welfare Eligibility Workers & Interviewers	476	415	-60	-12.6%	-1.3%	-8	10	10			10
97911	Wellhead Pumpers	298	215	-84	-28.1%	-3.2%	-8	7	7	\$17.43	\$16.27	10
21302	Wholesale & Retail Buyers, Except Farm Products	900	999	99	11.0%	1.1%	10	22	32	\$12.77	\$9.32	05
89308	Wood Machinists	82	79	-3	-3.7%	-0.3%	0	1	1	\$10.16	\$8.31	09
92314	Woodworking Machine Operators & Tenders, Except Sawing	735	737	2	0.3%	0.0%	0	17	17	\$11.27	\$9.97	10
92311	Woodworking Machine Setters & Set-Up Operators, Except Sawing	238	265	27	11.4%	0.7%	2	6	8	\$10.62	\$8.05	10
34002	Writers & Editors	1,176	1,383	205	17.4%	1.6%	21	31	52	\$14.00	\$10.61	05

** Training Level Required: 01 First professional degree, 02 Doctoral degree, 03 Master's degree, 04 Work experience plus degree, 05 Bachelor's degree, 06 Associate degree, 07 Postsecondary vocational training, 08 Work experience in a related occupation, 09 Long-term on-the-job training, 10 Moderate-term on-the-job training, 11 Short-term on-the-job training.

SOURCE: RESEARCH AND ANALYSIS BUREAU, MONTANA DEPARTMENT OF LABOR AND INDUSTRY.

*Numbers may not add due to rounding. ** See explanation of training levels at end of table. ***NEC=Not Elsewhere Classified

Only annual wage information is available for the following occupations:

Montana Occupations with Annual Wage Information

Job Projections 1998 - 2008

Occupations with Annual Wage Information, Sorted Alphabetically (Includes Self-Employed)

Occupational Code	Occupation	Job Estimates			Compounded Annual Growth Rate	Average Annual Openings			Annual Wage	Training Level** Required
		Base Year 1998	Projected Year 2008	Total Change		Due to Growth	Due to Replacements	Total Annual Openings*		
97702	Aircraft Pilots & Flight Engineers	222	234	12	5.4%	0.6%	1	5	\$37,840	06
31209	All Other Physical Sciences Teachers, Postsecondary - NEC***	297	372	75	25.3%	2.3%	8	8	\$40,830	02
31299	All Other Postsecondary Teachers - NEC***	971	1,215	244	25.1%	2.3%	24	27	\$51,840	02
31399	All Other Teachers & Instructors - NEC***	527	587	40	7.6%	0.7%	4	6	\$20,740	06
31231	Anthropology & Sociology Teachers, Postsecondary	38	47	9	23.7%	2.2%	1	1	\$44,420	02
31218	Art, Drama & Music Teachers, Postsecondary	222	278	56	25.2%	2.3%	6	6	\$42,920	02
31242	Business Teachers, Postsecondary	345	432	87	25.2%	2.3%	6	10	\$50,190	02
31228	Computer Science Teachers, Postsecondary	98	149	51	52.0%	4.3%	5	3	\$47,260	02
31252	Education Teachers, Postsecondary	187	209	42	25.1%	2.3%	4	5	\$39,830	02
31214	English Language & Literature Teachers, Postsecondary	434	543	109	25.1%	2.3%	11	12	\$35,030	02
31235	History Teachers, Postsecondary	83	70	16	25.4%	2.3%	2	2	\$51,260	02
31224	Mathematical Sciences Teachers, Postsecondary	185	232	47	25.4%	2.3%	5	5	\$48,000	02
34047	Music Directors, Singers, Composers & Related Workers	236	260	24	10.2%	1.0%	2	5	\$33,690	00
34051	Musicians, Instrumental	381	405	44	12.2%	1.2%	4	7	\$31,380	00
31114	Nursing Instructors, Postsecondary	157	197	40	26.6%	2.3%	4	3	\$42,080	03
34056	Producers, Directors, Actors & Other Entertainers	443	582	139	31.4%	2.8%	14	10	\$31,760	00
31247	Social Work Teachers, Postsecondary	286	358	72	26.2%	2.3%	7	8	\$48,480	02
31305	Teachers, Elementary School	8,940	8,959	29	0.4%	0.0%	3	160	\$30,740	06
31304	Teachers, Kindergarten	403	406	3	0.7%	0.1%	0	0	\$27,090	06
31308	Teachers, Secondary School	4,687	4,687	0	0.0%	0.0%	0	201	\$31,160	06
31311	Teachers, Special Education	1,257	1,518	259	20.6%	1.8%	26	11	\$29,730	06

** Training Level Required: 01 First professional degree, 02 Doctoral degree, 03 Master's degree, 04 Work experience plus degree, 05 Bachelor's degree, 06 Associate degree, 07 Postsecondary vocational training, 08 Work experience in a related occupation, 09 Long-term on-the-job training, 10 Moderate-term on-the-job training, 11 Short-term on-the-job training.

SOURCE: RESEARCH AND ANALYSIS BUREAU, MONTANA DEPARTMENT OF LABOR AND INDUSTRY.

*Numbers may not add due to rounding. ** See explanation of training levels at end of table. ***NEC=Not Elsewhere Classified

U.S. Job Projections

For U.S. Industries, 1998-2008.....	38
For U.S. Occupations, 1998-2008.....	40

Job Projections for U.S. Industries, 1998-2008

U.S. Employment Projected to Grow by 20.3 Million Jobs

The U.S. Bureau of Labor Statistics projects total U.S. employment will grow by 20.3 million jobs from 1998-2008, translating to about 1.4 percent growth per year.

Most job growth is projected to occur in nonfarm, wage and salary jobs, with agricultural jobs projected to decline overall. The services and retail trade industry divisions will account for nearly three-quarters of all new jobs.

Goods-Producing Industries Projected to Gain about 346,800 Jobs

Mining: Mining wage and salary jobs are expected to decline by about 2.1 percent a year from 590,000 to 475,000 between 1998 and 2008. Three industries with nearly half of the employment in the mining division—metal mining; coal mining; and crude petroleum, natural gas and gas liquids—account for about 90 percent of the decline. Oil and gas field services is the only mining sector projected to experience any growth—from 196,000 jobs in 1998 to 205,000 in 2008. While mining employment declines, increases in productivity are expected to result in overall output growth of 1.2 percent a year.

Construction: Construction is the only goods-producing sector projected to gain employment between 1998 and 2008, increasing by 550,000 new jobs. Projected annual job growth of 0.9 percent is down, however, from the 1.6 percent growth posted during the previous 10-year period.

Manufacturing: The historic decline in manufacturing employment is expected to moderate. Employment is projected to shrink by an annual rate of 0.3 percent from 18.8 million to 18.7 million jobs between 1998 and 2008.

Service-Producing Industries Projected to Grow by 19.1 Million Jobs

Narrowly Defined Services: Services employment is projected to increase by an annual growth of 2.8 percent through 2008, amounting to 11.8 million new wage and salary jobs during the 10-year period. From 1998-2008, 4.6 million jobs are projected to be added in business services, 2.8 million jobs in health services and 1.1 million jobs in engineering management and other services. The fastest employment growth in the entire U.S. economy is in computer and data processing services (8.1 percent per year).

Wholesale and retail trade: Wholesale trade is projected to gain about 500,000 jobs from 1998-2008 for an annual growth rate of 0.7 percent. Retail trade is projected to add about 1.7 million jobs—for an annual growth rate of 1.3 percent.

Government: Government employment is projected to increase by an annual growth rate of 0.9 percent and 1.9 million jobs overall from 1998-2008. State and local government education is expected to show the fastest employment growth within the public sector, with 1.3 percent annual growth through 2008. State and local government overall is expected to grow at an annual rate of 1.1 percent. Federal government jobs are projected to decline by 0.5 percent annually through 2008.

Transportation, communications and utilities: Transportation, communications and utilities is projected to add about 940,000 jobs (1.3 percent annual growth) from 1998-2008. The telephone, telegraph and communications services industry is projected to produce 244,000 of those new jobs.

Finance, insurance and real estate: It is projected that finance, insurance and real estate will add 960,000 jobs (1.2 percent annual growth)

from 1998-2008. The security and commodity brokers industry is expected to account for 255,000 of those jobs.

The table on this page shows the projected growth or decline of jobs within major U.S. industry divisions. More detailed information can be

found in the November 1999 issue of the Bureau of Labor Statistics' *Monthly Labor Review* publication or on the bureau's Internet website at <http://stats.bls.gov/>.

U.S. INDUSTRY JOBS 1988, 1998 and Projected to 2008

Industry	Thousands of Jobs			Average Annual Rate of Change	
	1988	1998	Projected to 2008	1988-1998	1998-2008
Total (1)	120,010	140,514	160,795	1.6%	1.4%
Nonfarm wage & salary (2)	105,723	125,849	145,285	1.8%	1.4%
Goods producing	25,125	25,347	25,694	0.1%	0.1%
Mining	713	590	475	-1.9%	-2.1%
Construction	5,098	5,985	6,535	1.6%	0.9%
Manufacturing	19,314	18,772	18,684	-0.3%	0.0%
Durable	11,363	11,170	11,277	-0.2%	0.1%
Nondurable	7,951	7,602	7,406	-0.4%	-0.3%
Service producing	80,598	100,502	119,591	2.2%	1.8%
Transportation, communications & utilities	5,512	6,600	7,541	1.8%	1.3%
Wholesale trade	6,030	6,831	7,330	1.3%	0.7%
Retail trade	19,023	22,296	25,363	1.6%	1.3%
Finance, insurance & real estate	6,629	7,408	8,367	1.1%	1.2%
Services	26,019	37,548	49,302	3.7%	2.8%
Government	17,386	19,819	21,688	1.3%	0.9%
Federal government	2,971	2,686	2,550	-1.0%	-0.5%
State & local government	14,415	17,133	19,138	1.7%	1.1%
Agriculture (3)	3,355	3,576	3,526	0.6%	-0.1%
Private household, wage & salary	1,153	962	759	-1.8%	-2.3%
Nonag self-employed & unpaid family workers (4)	8,731	9,029	9,925	0.3%	1.0%
Secondary wage & salary jobs in agriculture (except agricultural services); forestry, fishing, hunting & trapping; and private households (5)	211	163	158	-2.5%	-0.3%
Secondary jobs as self-employed or unpaid family worker (6)	1,990	1,897	1,901	-0.5%	0.0%

(1) Employment data for wage & salary workers is from the BLS Current Employment Statistics (payroll) survey, which counts jobs, whereas self-employed, unpaid family worker, agricultural and private household data are from the Current Population Survey (household survey), which counts workers.

(2) Excludes SIC 074,S,8 (agricultural services) and 99 (nonclassifiable establishments), and is therefore not directly comparable with data published in the Bureau of Labor Statistics monthly periodical, *Employment and Earnings*.

(3) Excludes government wage & salary workers, and includes private sector for SIC 08,09 (forestry, fishing, hunting & trapping).

(4) Excludes SIC 08,09 (forestry, fishing, hunting & trapping).

(5) Workers who hold a secondary wage & salary job in agriculture (except agricultural services), forestry, fishing, hunting & trapping, and private households.

(6) Wage & salary workers who hold a secondary job as a self-employed or unpaid family worker.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, *Monthly Labor Review*, November 1999

Job Projections for U.S. Occupations, 1998-2008

Occupational Job Projections, 1998-2008

The U.S. Bureau of Labor Statistics projects an increase of 55 million job openings for the nation from 1998-2008. Of those job openings, about 20.3 million will result from employment growth in the economy and another 34.7 million will come when jobs vacated by workers who leave the labor force or move to other occupations are filled with replacement workers. Generally, openings resulting from replacement needs are far greater than those coming from increased demand. Large occupations that are not expected to show much job growth will generate more jobs than fast-growing smaller occupations.

Employment Growth within Occupational Groups

Employment in professional specialty occupations (e.g., computer engineers, system analysts, teachers, registered nurses, etc.) is projected to increase the fastest and add the most jobs from 1998-2008. The small technicians and related support occupations group (e.g., health technicians and technologists, engineering technicians, etc.) is projected to rank 2nd in growth. The services occupations group (e.g., cleaning, food preparation and service, protective services, etc.) is projected to rank 3rd in growth—and the executive, administrative and managerial occupations group is projected to rank 4th. Together, professional specialty occupations and service occupations, which are on the opposite ends of the educational spectrum, are expected to provide 44 percent of the total job growth in the United States from 1998 to 2008.

Education and Training Requirements

All of the occupational categories requiring at least an associate degree are projected to have faster-than-average employment growth from 1998-2008. Occupations requiring an associate degree or more education will account for 40 percent of total job growth from 1998-2008—up from about 25 percent in 1998.

U.S. Occupations with the Largest Job Growth

Most of the occupations with the largest projected job growth for 1998-2008 are concentrated in retail trade (which includes eating and drinking places); business services; health services; and public and private education.

Within retail trade, a large number of additional jobs are expected for retail salespersons; cashiers; waiters and waitresses; marketing and sales worker supervisors; and food, counter, fountain and related workers.

In the business services sector, the computer and data processing services industry is expected to generate lots of jobs for systems analysts; computer support specialists; and computer engineers.

The health services sector is projected to provide numerous opportunities for registered nurses; personal care and home health aides; and nursing aides, orderlies and attendants.

Within public and private education, jobs are expected to increase for teacher assistants; elementary and secondary school teachers; and college and university faculty.

Other occupations—such as general managers and top executives; janitors and cleaners; and truck drivers—will provide a large number of jobs mainly due to the large size of those occupations.

The table on this page lists those occupations that are projected to generate the most new jobs due to industry growth (excluding replacement jobs) in the U.S. economy during the 1998-2008 time period.

U.S. Occupations with the Largest Job Growth 1998-2008 (Numbers in thousands of jobs)

Occupation	Employment		Change	
	1998	2008	Number	Percent
Systems analysts	617	1,194	577	94%
Retail salespersons	4,056	4,620	563	14%
Cashiers	3,198	3,754	556	17%
General managers & top executives	3,362	3,913	551	16%
Truck drivers, light & heavy	2,970	3,463	493	17%
Office clerks, general	3,021	3,484	463	15%
Registered nurses	2,079	2,530	451	22%
Computer support specialists	429	869	439	102%
Personal care & home health aides	746	1,179	433	58%
Teacher assistants	1,192	1,567	375	31%
Janitors & cleaners, including maids & housekeeping cleaners	3,184	3,549	365	11%
Nursing aides, orderlies & attendants	1,367	1,692	325	24%
Computer engineers	299	622	323	108%
Teachers, secondary school	1,426	1,749	322	23%
Office & admin. support supervisors & managers	1,611	1,924	313	19%
Receptionists & information clerks	1,293	1,599	305	24%
Waiters & waitresses	2,019	2,322	303	15%
Guards	1,027	1,321	294	29%
Marketing & sales worker supervisors	2,584	2,847	263	10%
Food counter, fountain & related workers	2,025	2,272	247	12%
Child care workers	905	1,141	236	26%
Laborers, landscaping & groundskeeping	1,130	1,364	234	21%
Social workers	604	822	218	36%
Hand packers & packagers	984	1,197	213	22%
Teachers, elementary school	1,754	1,959	205	12%
Blue-collar worker supervisors	2,198	2,394	196	9%
College & university faculty	865	1,061	195	23%
Computer programmers	648	839	191	30%
Adjustment clerks	479	642	163	34%
Correctional officers	383	532	148	39%

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Monthly Labor Review," November 1999.

U.S. Occupations with the Largest Job Decline

Projected declines in industry employment and changes in occupational staffing patterns are expected to reduce demand for workers in some occupations over the 1998-2008 period.

Industry employment change is the major reason for projected employment declines for sewing machine operators, garment; and for butchers and meatcutters. Technological change is the major reason for projected declines for word processors and typists; bookkeeping, accounting and auditing clerks; and bank tellers.

Occupations expected to decline because of both industry and occupational structure changes include farmers; farmworkers; welfare eligibility workers and interviewers; and railroad brake, signal and switch operators.

The table on this page lists those occupations that are projected to lose the most jobs (excluding replacement jobs) in the United States from 1998-2008.

U.S. Occupations with the Largest Job Decline **1998-2008**

(Numbers in thousands of jobs)

Occupation	Employment		Change	
	1998	2008	Number	Percent
Farmers	1,308	1,135	-173	-13%
Sewing machine operators, garment	369	257	-112	-30%
Child care workers, private household	306	209	-97	-32%
Word processors & typists	459	365	-93	-20%
Bookkeeping, accounting & auditing clerks	2,078	1,997	-81	-4%
Cleaners and servants, private household	600	530	-71	-12%
Farmworkers	851	794	-57	-7%
Computer operators, except peripheral equipment	224	170	-54	-24%
Textile draw-out & winding machine operators & tenders	192	141	-50	-26%
Bank tellers	560	529	-31	-5%
Switchboard operators	214	185	-30	-14%
Inspectors, testers & graders, precision	689	667	-22	-3%
Machine tool cutting operators & tenders, metal & plastic	109	88	-22	-20%
Butchers & meatcutters	216	201	-15	-7%
Payroll & timekeeping clerks	172	161	-11	-6%
Peripheral equipment operators	27	17	-10	-38%
Woodworking machine operators & tenders, setters & set-up operators	79	69	-10	-13%
Offset lithographic press operators	63	54	-9	-15%
Fishers	40	31	-9	-23%
Procurement clerks	58	49	-9	-15%
Station installers & repairers, telephone	24	16	-8	-34%
Welfare eligibility workers & interviewers	109	100	-8	-8%
Typesetting & composing machine operators & tenders	13	5	-8	-60%
Drilling & boring machine tool setters & set-up operators, metal & plastic	42	34	-8	-18%
Film strippers, printing	23	15	-8	-33%
Directory assistance operators	23	16	-7	-31%
Housekeepers & butlers	17	10	-7	-42%
Grinding, lapping & buffing machine tool setters & set-up operators, metal & plastic	75	68	-7	-10%
Proofreaders & copy markers	41	34	-7	-17%
Railroad brake, signal & switch operators	14	7	-7	-48%

Source: U.S. Department of Labor, Bureau of Labor Statistics, "Monthly Labor Review," November 1999.

Methodology and Occupational Descriptions

Methodology for Montana Industry Jobs Projections.....	44
Factors Used to Project Montana Industry Jobs.....	46
Methodology for Montana Occupational Jobs Projections.....	53
Occupational Codes, Titles and Descriptions.....	54

Methodology for Montana Industry Jobs Projections

The first step in the industry employment projection methodology was to assemble historical employment data at the 3-digit Standard Industrial Classification (SIC) level. The Standard Industrial Classification scheme is a collection of numerical codes used as a standard for compiling economic data by industry. The 3-digit coding level is a fairly detailed level. (*See the first column of the "Factors Used to Project Montana Industry Jobs" table on pages 46-52.*)

The data source for the recent historical employment data was primarily administrative records from the Montana unemployment insurance system, the so-called ES-202 data. Also used as base were 3-digit industry level data for 1961-1984 from the Current Employment Statistics (CES) program. Presumed noncovered employment was added to the recent ES-202 data for life insurance, private colleges and universities, private job training and vocational rehabilitation, religious organizations, state and local government education, and other local government.

The unemployment insurance system does not cover self-employed jobs, except on a very limited voluntary basis. The state system also does not cover railroad workers. In addition, there is only partial unemployment insurance coverage of production agriculture in Montana. Historical jobs information constructed by the Bureau of Economic Analysis (BEA), U.S. Department of Commerce, was used for self-employed jobs and production agriculture jobs. BEA in turn used Internal Revenue Service tax information to construct their self-employment data series. Information from the 5-year Censuses of Agriculture and from the U.S. Department of Agriculture was used by BEA to estimate jobs for all of production agriculture. Published information on railroad employment from the Current Employment Statistics Program was used for the

railroad industry. For all industries, historical information was available through the year 1998, with many economic sectors having information back to 1961.

Because of both systematic and individual establishment changes in SIC codes over the 1961-1998 time period, numerous adjustments to individual 3-digit sectors were required. The individual establishment SIC updating is an ongoing process. The systematic SIC changes happened with the publication of the 1967, 1972 and 1987 SIC manuals. The SIC reconciliation and sector adjustment was time-consuming, but very necessary for this projection project. Not all SIC changes could be reconciled resulting in shortened time series for some industries.

The second step in the methodology was to relate employment in a given industry to factors that tend to be associated with change in that industry's employment—such as national employment for the same industry or Montana's population. These and other factors were chosen based on economic theory, and analysts' knowledge of particular industries.

The third step was to estimate the quantitative relationship between a given industry's employment level over time and predictor factors or variables, like population. The statistical technique that was primarily used is called regression analysis. Standard statistical evaluation tools were employed to choose among different sets of variables. In 38 industries, the best projection was obtained by trending into the future the industry's historical employment level without relating that level to any predictor variables other than year. For very small industries, generally with employment levels less than 25, the growth rate for the counterpart U.S. industry was used to free up time for the larger industries. This method was used for 88 industries. Also, a dummy variable was used

from time to time for usual events such as major plant closings/openings, elections, and SIC changes. The table on pages 46-52 summarizes the factors and other methodological issues for each of Montana's industries.

The fourth step used forecast levels of predictor variables to project the year 2008 employment level for each Montana industry. For the national sector predictor variable, employment projections for counterpart U.S. industries were available from the U.S. Department of Labor's Bureau of Labor Statistics. Both published and unpublished national industry data were used to forecast 114 Montana industries. The published data was in the November 1999 issue of the BLS *Monthly Labor Review*.

For the predictor variable population, the forecast level of Montana's total population used was derived from one constructed by NPA Data Services (formerly known as the National Planning Association), a longstanding Washington, D.C. research organization. NPA Data Services projects total population (also by age) for all counties and states in the U.S. The 1998-2008 growth rate for the NPA Montana population forecast was 0.9 percent per year, basically the same as the NPA forecast U.S. growth rate. Based on the de-acceleration of Montana population growth over the 1996-1999 period, the NPA forecast level of Montana population was judgmentally reduced to 954,000, or 0.8 percent per year. Population was used as an independent (predictor) variable for 61 industries.

Montana building construction employment was an important predictor variable for sectors that are tied to building activity. These included special trade contractors (most special trade employees—such as carpenters, electricians and plumbers—work on buildings). Building construction jobs also influenced concrete products manufacturing, retail building supplies stores, mobile home dealers, engineering/architectural services, and wholesale lumber, electrical, and plumbing/heating sectors.

The fifth and last step involved comparing the produced projections with similar Montana projections done by other organizations in order to gauge the reasonableness of the generated projections.

NPA Data Services projects industry employment by broad industry groups that include the self-employed. Its September 1999 employment projection averaged 1.7 percent growth between 1997 and 2008, compared with 1.5 percent growth for Montana industry projections highlighted in this publication. In late 1999, another research firm, Woods and Poole Economics, Inc., projected a growth rate of 1.8 percent overall for 1997 to 2005, and 1.6 percent per year for 1997 to 2010.

These comparisons support the conclusion that the projections contained in this report are reasonable overall. Because the future is always uncertain, however, individual projections are rarely precisely accurate.

Please refer to the "Factors Used to Project Montana Industry Jobs" table on the following 7 pages for a more detailed presentation of the factors used to project Montana industry employment for specific industry sectors and subsectors.

Factors Used to Project Montana Industry Jobs

SIC Code*	INDUSTRY	Adj R2**	U S Sector Jobs	Montana Population	Time	Montana Building Construction	U S Sector Growth Rate	Other Variables	Dummy Variable	Other Methodological Comments***
AGRICULTURE, FORESTRY & HUNTING										
01 & 02	PRODUCTION AGRICULTURE									
01 & 02	Agricultural Production, Crops & Livestock	0.71			X					1976 forward, U S Bureau of Economic Analysis jobs series, omitted atypical early 1970s
07	VETERINARY & OTHER AGRICULTURAL SERVICES									
071	Soil Preparation Services						X			
072	Crop Services						X			
074	Veterinary Services (includes both small & large animal)	0.84		X						1984+ (date destroyed before 1984)
075	Kennels & Other Animal Services, except Veterinary	0.85		X						1984+ (date destroyed before 1984)
078	Farm Labor & Management Services									Assumed constant 1999 estimate
078	Landscape & Horticultural Services	0.84		X						1984+ (date destroyed before 1984)
08	TIMBER TRACTS, NURSERIES & FORESTRY SERVICES									
081	Timber Tracts						X			
083	Forest Nurseries & Gathering	0.25			X					1989+, start of the Montana data series
085	Forestry Services	0.49						X		1990+ using SIC 241, logging as independent (predictor) variable
09	FISHING, HUNTING, TRAPPING, GAME PROPAGATION									
097	Hunting, Trapping & Game Propagation	0.85			X					1987+, start of the Montana data series
MINING										
10	METAL MINING									
101	Iron Ores						X			
102	Copper Ores	0.73	X							
103	Lead & Zinc Ores						X			
104	Gold & Silver Ores	0.91	X						X	1976+, dummy variable for 1995-98 due to mine closures
108	Metal Mining Services						X			
109	Palladium/Platinum & Other Metal Ores									Stillwater Mining Company's announced expansion plans
12	COAL MINING									
122	Bituminous Coal Mining	0.80	X							1984 forward, data not available before 1984
124	Coal Mining Services									Average of last 15 years
13	OIL & GAS EXTRACTION									
131	Crude Petroleum & Natural Gas	0.89	X						X	1975+ (SIC Change), dummy added for 1995-98 differential experience
138	Oil & Gas Field Services	0.88	X						X	Dummy variable for 1990s, adjusted for exploration ban on the Rocky Mountain Front
14	NONENERGY, NONMETAL MINING									
141	Dimension Stone						X			
142	Crushed & Broken Stone						X			
144	S&G Gravel	0.67		X						
145	Clay, Ceramic & Refractory Minerals						X			
147	Chemical & Fertilizer Mining						X			
148	Nonmetallic Minerals Services									Average of last 7 years
149	Talc & Other Miscellaneous Nonmetallic Mining	0.80	X						X	1986+
CONSTRUCTION										
15	GENERAL BUILDING CONSTRUCTION									
152	Residential Building Contractors	0.85		X						1984 forward
153	Operative Builders									Average of last 7 years
154	Nonresidential Building Contractors	0.94		X					X	1982+, dummy variable for 1997-98, one-time construction of the ASIMI plant in Butte
16	HEAVY CONSTRUCTION									
161	Highway & Street Contractors	0.78								Autoregression Integrated Moving Average model (1,1,0)
162	Water/Sewer & Other Heavy Construction Contractors	0.20	X							1972 forward, U S jobs series only available 1972+, regression fit the 1990s well
17	SPECIAL TRADES CONSTRUCTION									
171	Plumbing, Heating, Air Conditioning Contractors	0.97				X				1987+ using SIC 15 as predictor (independent variable); growth in building const. since '87
172	Painting & Paper Hanging Contractors	0.94				X				1987+ using SIC 15 as predictor (independent variable); growth in building const. since '87
173	Electrical Contractors	0.91				X				1987+ using SIC 15 as predictor (independent variable); growth in building const. since '87
174	Masonry, Stonework & Plastering	0.94				X				1987+ using SIC 15 as predictor (independent variable); growth in building const. since '87
175	Carpentry & Floor Work	0.98				X				1987+ using SIC 15 as predictor (independent variable); growth in building const. since '87
178	Roofing, Siding & Sheet Metal Work	0.96				X				1987+ using SIC 15 as predictor (independent variable); growth in building const. since '87
177	Concrete Work	0.82				X				1987+ using SIC 15 as predictor (independent variable); growth in building const. since '87
178	Water Well Drilling	0.94				X				1987+ using SIC 15 as predictor (independent variable); growth in building const. since '87
179	Excavation, Structural Steel Erection & Other Special Trades	0.90				X				1987+ using SIC 15 as predictor (independent variable); growth in building const. since '87
MANUFACTURING										
20	FOOD PROCESSING									
201	Meat Products	0.59	X							1985+, restructured industry
202	Dairy Products	0.85			X					Consistent with the consolidation in this industry
203	Preserved Fruits & Vegetables						X			
204	Flour, Prepared Feeds & Other Grain Mill Products	0.57	X							
205	Bakery Products	0.92	X						X	1972+, U S data only for 1972+, dummy variable for 1998 reclassification

Factors Used to Project Montana Industry Jobs

SIC Code*	INDUSTRY	Adj. R2**	U.S. Sector Jobs	Montana Population	Time	Montana Building Construction	U.S. Sector Growth Rate	Other Variables	Dummy Variable	Other Methodological Comments***
206	Sugar & Confectionery Products	0.55			X					Projection is consistent with sugar plant layoffs associated with more free trade
207	Fats & Oils						X			
208	Beverages	0.72		X					X	1981+, dummy variable for 1989-98 due to industry restructuring or reclassification
209	Paste, Manufactured Ice & Other Food Processing	0.95		X					X	1982+, dummy variable for 1998 with a new plant operating
22	TEXTILE MILL PRODUCTS									
221	Broadwoven Fabric Mills, Cotton						X			
222	Broadwoven Fabric Mills, Synthetic						X			
225	Knitting Mills						X			
226	Textile Finishing, Except Wool						X			
229	Other Textile Goods						X			
23	APPAREL & OTHER FABRICATED TEXTILE PRODUCTS									
232	Men's & Boys' Clothing						X			
233	Women's Outerwear						X			
234	Women's & Children's Undergarments						X			
235	Hats, Caps & Millinery						X			
236	Girls' & Children's Outerwear						X			
239	Other Fabricated Textile Products	0.54	X							
24	LOGGING, LUMBER & OTHER WOOD PRODUCTS									
241	Logging	0.50								SIC 242 as predictor, 1968 forward
242	Sawmills & Planing Mills	0.91	X						X	Restructured industry 1995 forward; history 1968+
243	Millwork, Plywood & Structural Members	0.75	X						X	1981+, dummy variable for 1995-98
244	Wood Containers	0.81			X					1975+ (SIC change)
245	Log Homes & Other Prefabricated Wood Buildings	0.69		X						1987+, growth in Montana building construction since 1987
249	Posts/Poles, Reconstituted & Other Wood Products	0.92		X						
25	FURNITURE MANUFACTURING									
251	Household Furniture Manufacturing	0.96			X					1985+, break in series
252	Office Furniture	0.91			X					1985+, trivial employment before 1985
253	Public Building & Related Furniture									Mean value
254	Partitions & Fixtures	0.79	X							1975+ (SIC change)
259	Other Furniture						X			
26	PAPER PRODUCTS									
263	Paperboard Mills	0.63			X					1984+
265	Paperboard Containers						X			
267	Other Converted Paper Products	0.38			X					1984+ (data destroyed before 1984), using the reciprocal of time squared as predictor
27	PRINTING & PUBLISHING									
271	Newspapers	0.78		X						
272	Periodicals						X			
273	Books	0.83	X							1975+, trivial employment before 1975
274	Directories & Other Publishing	0.93			X					1982+, break in Montana data series
275	Commercial Printing	0.94	X							
278	Checkbooks, Other Blankbooks & Bookbinding						X			
279	Printing Trade Services						X			
28	CHEMICALS									
281	Industrial Inorganic Chemicals	0.47			X				X	1975+, dummy variable for 1997-98 for a major plant closing
282	Plastics Materials & Synthetic Resins						X			
283	Drugs	0.59	X							1988+ (new plant); trivial employment before 1988
284	Soap, Cleaners & Toilet Preparations									Average of last 7 years
285	Paints & Allied products									Mean value
286	Silicones & Other Industrial Organic Chemicals									Planned expansion of the Advanced Silicon Materials (ASMI) plant
287	Agricultural Chemicals	0.44			X					1991+ because of major plant closures
289	Other Chemicals						X			
29	PETROLEUM PRODUCTS									
291	Petroleum Refining	0.71			X					
295	Asphalt Paving & Roofing Materials						X			
30	RUBBER & PLASTIC PRODUCTS									
302	Rubber & Plastic Footwear									Trivial employment, projection by assumption
305	Hose, Belting, Gaskets						X			
306	Other Fabricated Rubber Products	0.86			X					1987+, trivial employment before 1987
308	Miscellaneous Plastic Products	0.52	X							1984+
31	LEATHER PRODUCTS									
311	Leather Tanning & Finishing						X			
314	Footwear, except Rubber						X			
319	Other Leather Goods						X			

Factors Used to Project Montana Industry Jobs

SIC Code*	INDUSTRY	Adj. R2**	U.S. Sector Jobs	Montana Population	Time	Montana Building Construction	U.S. Sector Growth Rate	Other Variables	Dummy Variable	Other Methodological Comments***
32	STONE, CLAY & GLASS PRODUCTS									
323	Products of Purchased Glass						X			
324	Hydraulic Cement	0.81	X			X				Montana total construction as second independent variable
325	Structural Clay Products						X			
326	Pottery Products						X			
327	Concrete & Concrete Products	0.59				X				1987+ using Building Construction (SIC 15+17) as the independent variable
328	Cut Stone & Stone Products						X			
329	Miscellaneous Nonmetallic Mineral Products						X			
33	PRIMARY METALS INDUSTRIES									
332	Iron & Steel Foundries						X			
333	Primary Aluminum & Lead Processing	0.86	X							Reciprocal of U.S. employment as predictor to eliminate negative 2008 projection
336	Nonferrous Foundries	0.88		X						1970+ (sector started in 1970)
339	Other Primary Metal Products						X			
34	FABRICATED METAL PRODUCTS									
342	Cutlery, Handtools & Hardware	0.71		X						
343	Plumbing & Heating Metal Products, except Electric						X			
344	Fabricated Structural Metal Products	0.73		X						1965+
345	Screw Machine Products						X			
346	Metal Forgings & Stampings						X			
347	Metal Services (not elsewhere classified)						X			
348	Small Arms & Other Ordnance & Accessories	0.78		X						1975+ (SIC change)
349	Miscellaneous Fabricated Metal Products						X			
35	INDUSTRIAL MACHINERY									
352	Farm & Garden Machinery						X			
353	Construction, Mining & Related Machinery	0.49		X						
354	Machine Tool Accessories & Other Metalworking Machinery						X			
355	Special Industry Machinery	0.80	X							1984+, trivial employment before 1984
356	General Industrial Machinery	0.81	X							1992+, SIC change in 1988, plant closure in 1992
357	Computer & Office Equipment						X			
358	Refrigeration & Service Industry Machinery						X			
359	Machine Shops & Other Industrial Machinery	0.66			X				X	Dummy for 1996-98
36	ELECTRONIC & OTHER ELECTRICAL EQUIPMENT									
361	Electric Distribution Equipment									The company's operations are for sale, assumed transfer of employment out-of-state
362	Electrical Industrial Apparatus						X			
363	Household Appliances						X			
364	Electric Lighting & Wiring Equipment									Average of last 7 years
366	Communications Equipment						X			
367	Electronic Components	0.35	X							1966+
369	Other Electrical Equipment						X			
37	TRANSPORTATION EQUIPMENT									
371	Motor Vehicles & Equipment	0.90			X					
372	Aircraft & Parts						X			
373	Boat Building & Repairing						X			
374	Railroad Equipment						X			
375	Motorcycles, Bicycles & Parts						X			
379	Campers & Other Transportation Equipment	0.76			X					1988+, SIC change in 1975
38	MEASURING, CONTROLLING & MEDICAL INSTRUMENTS									
381	Search & Navigation Equipment						X			
382	Measuring & Controlling Instruments	0.61			X					1989+, trivial employment before 1989
384	Dental & Other Medical Instruments	0.89			X					
386	Photographic Equipment & Supplies						X			
39	SPORTING GOODS, GAMES, JEWELRY & OTHER MFG									
391	Jewelry, Silverware & Plated Ware	0.90		X						
393	Musical Instruments						X			Montana sector declined 1995-99
394	Sporting Goods, Games & Toys	0.81	X							1985+, basically no Montana industry before 1985
395	Pens, Pencils & Other Artists' Materials						X			
396	Costume Jewelry & Novelties						X			
399	Signs & Other Manufacturing	0.83	X						X	1972+, U.S. jobs series only available 1972+, dummy variable for 1995-98
	TRANSPORTATION & UTILITIES									
40	RAILROADS									
401	Railroads	0.90	X							
41	LOCAL TRANSPORTATION									
411	Ambulance & Other Local & Suburban Private Transit	0.94	X							1975+ (SIC change)

Factors Used to Project Montana Industry Jobs

SIC Code*	INDUSTRY	Adj R2**	U.S. Sector Jobs	Montana Population	Time	Montana Building Construction	U.S. Sector Growth Rate	Other Variables	Dummy Variable	Other Methodological Comments***
412	Taxis	0.78	X							
413	Intercity & Rural Bus Transportation	0.67	X							
414	Bus Charter Service						X			
415	School Buses	0.79						X	X	1982+, school enrollment as main independent variable, dummy variable for 1997-98
417	Bus Terminal Services						X			
42	MOTOR FREIGHT TRANSPORTATION									
421	Trucking	0.89		X						
422	Public Warehousing & Storage	0.72	X							1987+, volatile data series, farm storage component is now minimal
44	WATER TRANSPORTATION									
448	Water Passenger Transportation						X			
449	Marinas & Other Water Transportation Services						X			
45	AIR TRANSPORTATION									
451	Air Transportation, Scheduled & Air Courier	0.66	X							1988 forward (firm reclassification)
452	Air Transportation, Nonscheduled	0.97	X							1988+ (SIC change), dummy variable for 1996-98 because of reclassification
458	Airports & Flying Fields	0.93		X						1988+ (SIC change)
46	PIPELINES, EXCEPT NATURAL GAS									
461	Pipelines, Except Natural Gas	0.84			X				X	Dummy variable for 1996-98 for extra employees for one-time replacement project
47	TRANSPORTATION SERVICES									
472	Arrangement of Passenger Transportation									Held 1999 estimate constant in light of industry restructuring with Internet competition
473	Freight Transportation Arrangement	0.97	X							1986+
478	Other Transportation Services	0.94	X							1990 forward because of reclassification
48	COMMUNICATIONS									
481	Telephone Communication	0.83	X						X	1970+, using 2008 U.S. employment forecast from WEA, Inc., dummy variable for 1994-98
482	Telegraph & Other Message Communication									Judgment on growth of e-mail
483	Radio & Television Broadcasting	0.96	X							
484	Cable & Other Pay Television Services	0.89		X						1984+ (data destroyed before 1984)
489	Other Communications Services						X			
49	ELECTRIC, GAS & SANITARY SERVICES									
491	Electric Services	0.94	X						X	1964+, dummy variable for 1993-98 because of industry restructuring
492	Gas Production & Distribution									Mean of the last 10 years
493	Combination Gas & Electric Utility Services	0.85	X	X						
494	Water Supply	0.92	X						X	1972+, dummy variable for 1992+, the private Butte Water Co. was sold to Butte local gov't
495	Sanitary Services	0.93		X						
497	Private Irrigation Systems									Mean value
	WHOLESALE TRADE									
50	WHOLESALE TRADE, DURABLE GOODS									
501	Wholesale Motor Vehicles, Parts & Supplies	0.85		X						
502	Wholesale Furniture & Home Furnishings	0.78	X							1975+ (SIC change)
503	Wholesale Lumber & Other Construction Materials	0.38				X			X	1975+ (SIC change), dummy variable for 1998
504	Wholesale Professional & Commercial Equipment & Supplies	0.59		X						1988+ (SIC change)
505	Wholesale Metals & Minerals, Except Petroleum	0.53	X						X	1975+ (SIC change), dummy variable for 1993-1998 because of a firm reclassification
506	Wholesale Electrical Goods	0.93				X				1988+, SIC15+17 (total building construction) as predictor variable
507	Wholesale Hardware, Plumbing & Heating Equipment	0.71				X				SIC15+17 (total building construction) as predictor variable
508	Wholesale Machinery, Equipment & Supplies	0.83		X						1985+ (SIC change made back to 1984)
509	Other Wholesale Durable Goods	0.83	X							1985+, dummy variable for 1993-98 because of a reclassification
51	WHOLESALE TRADE, NONDURABLE GOODS									
511	Wholesale Paper & Paper Products	0.85		X					X	1975+ (SIC change), dummy variable for 1998 because of new stores
512	Wholesale Drugs & Proprietarys						X			
513	Wholesale Apparel	0.76		X						1975+ (SIC change)
514	Distribution of Groceries & Related Products	0.95	X							1975+ (SIC change)
515	Wholesale Grain, Livestock & Other Farm Products	0.94	X							1975+ (SIC change)
516	Wholesale Chemicals & Related Products	0.90						X		1975+ (SIC change), used SIC 138, Oil & Gas Exploration, as independent variable
517	Petroleum & Petroleum Products Distribution	0.84	X							1980+
518	Beer, Wine & Distilled Beverages Distribution	0.90	X							1975+ (SIC change)
519	Other Wholesale Trade-Nondurable Goods	0.84		X						1975+ (SIC change)
	RETAIL TRADE									
52	BUILDING MATERIALS & MOBILE HOME DEALERS									
521	Lumber & Other Building Supplies	0.98				X				1975+ (SIC change), SIC15+17 (total building construction) as predictor variable
523	Paint, Glass & Wallpaper Stores	0.94		X						
525	Hardware Stores	0.90		X						1975+ (SIC change)
526	Retail Nurseries & Garden Stores	0.77		X						1975+ (SIC change)
527	Mobile Home Dealers	0.95				X				1987+, SIC15+17 as predictor (independent) variable
53	GENERAL MERCHANDISE STORES									

Factors Used to Project Montana Industry Jobs

SIC Code*	INDUSTRY	Adj. R2**	U.S. Sector Jobs	Montana Population	Time	Montana Building Construction	U.S. Sector Growth Rate	Other Variables	Dummy Variable	Other Methodological Comments***
531	Department Stores (includes discount dept. stores)	0.94		X					X	Dummy variable 1996-98, for nonpopulation related discount store expansion in the 1990s
533	Variety Stores	0.59			X					
539	Smaller Dept. Stores & Other General Merchandise Stores						X			
54	FOOD STORES									
541	Grocery Stores	0.96	X							1972+, U.S. data only available 1972+
542	Meat & Fish Markets	0.45	X						X	1972+, U.S. data only available 1972+, dummy variable for 1995-98
543	Fruit & Vegetable Markets						X			
544	Candy, Nut & Confectionery Stores						X			
546	Retail Bakeries	0.74		X					X	Dummy variable used for 1998 due to reclassification
549	Health & Other Miscellaneous Food Stores	0.96	X							U.S. data available only 1975+
55	MDTOR VEHICLE DEALERS & SERVICE STATIONS									
551	New & Used Motor Vehicle Dealers	0.77						X		1981+, real (inflation adjusted) Montana personal income as predictor variable
552	Exclusively Used Motor Vehicle Dealers	0.83	X						X	1972+, U.S. data only available 1972+, dummy variable for 1997-98
553	Auto Parts & Home Supply Stores	0.93	X						X	1975+ (SIC change), dummy variable for 1997-98
554	Gasoline Service Stations	0.97						X		1982+, real Montana personal income & real U.S. gasoline consumption as predictors
555	Boat Dealers	0.95			X					1975+
556	Recreational Vehicle Dealers	0.79	X							U.S. data available only 1985+
557	Motorcycle Dealers	0.61	X							1976+
559	Snowmobile & Other Motor Vehicle Dealers	0.97		X						1988+ (SIC change)
	RETAIL APPAREL STORES									
561	Men's & Boys' Clothing Stores	0.90	X							Used the square of U.S. employment for the independent variable to flatten decline
562	Women's Clothing Stores	0.96			X					1979+, Montana employment peaked in 1979
563	Women's Accessory & Specialty Stores	0.60	X							1976+ (U.S. employment available 1976+)
564	Children's & Infant's Clothing						X			
565	Family Clothing Stores	0.91	X							
566	Shoe Stores	0.92			X					1992+ (Montana employment peaked in 1992)
569	Other Apparel Stores	0.86		X					X	Dummy variable for 1997-98
57	HOME FURNISHINGS & EQUIPMENT STORES									
571	Furniture & Home Furnishings Stores	0.96		X						
572	Household Appliance Stores									No significant relationships, used this industry's mean value as the 2008 projection
573	Radio, Television & Music Stores	0.95	X							1972+, U.S. employment only available 1972+
58	EATING & DRINKING PLACES									
581	Eating & Drinking Places	0.96	X							
59	OTHER RETAIL TRADE									
591	Drugstores & Proprietary (Nonprescription) Stores	0.84			X					1985+, Montana industry losing the competition with department stores & food stores
592	Liquor Stores	0.80		X					X	Dummy variable for 1996-98, privatization of liquor stores
593	Pawn, Antique & Other Used Merchandise Stores	0.92		X					X	1975+, dummy variable for 1997-98
594	Sporting Goods, Gift Stores & Other Misc. Shopping Goods	0.93	X							1975+ (SIC change)
596	Nonstore Retailers (Catalog, Door-to-Door, Vending Mach.)	0.73		X					X	Dummy variable used for unusual years 1975, 78, 82-85, 91
598	Liquefied Petroleum Gas & Other Fuel Dealers	0.20		X						
599	Other Retail Stores	0.91	X							1976+, U.S. employment available 1976+
	FINANCE, INSURANCE & REAL ESTATE									
60	BANKS & OTHER DEPOSITORY INSTITUTIONS									
601	Federal Reserve Bank	0.88		X						1962+ (Montana data series started in 1962)
602	Commercial Banks	0.91		X						1988+
603	Savings Institutions	0.95		X					X	Dummy variable for 1993-98, due to industry restructuring
606	Credit Unions	0.93	X							1985+ (SIC change & data destroyed before 1984)
609	Trust & Other Functions Related to Banking	0.79		X						
61	NONDEPOSITORY CREDIT INSTITUTIONS									
611	Federally Sponsored Credit Agencies	0.93	X							1992+ (Montana data series started in 1992)
614	Personal Credit Institutions	0.43	X							1984+ (SIC change)
615	Agricultural & Other Business Credit Institutions	0.65						X		1984+ using production agriculture employment as independent variable
616	Mortgage Bankers & Brokers	0.88	X							1975+, trivial employment before 1975
62	SECURITY/COMMODITY BROKERS & SERVICES									
621	Security Brokers & Dealers	0.96	X							1972+, U.S. employment only available 1972+
622	Commodity Contracts Brokers & Dealers						X			
628	Investment Counseling & Other Security Services	0.74	X							1985+, U.S. employment available 1985+
63	INSURANCE CARRIERS									
631	Life Insurance	0.62			X					For the noncovered employment component, used time trend based on the 1992-99 period
632	Health Insurance Plans	0.92	X							
633	Fire, Marine & Casualty Insurance	0.80		X						
635	Financial Responsibility Insurance									Announced planned expansion of the sector's large firm, National Electronics Warranty
636	Title Insurance	0.90	X							

Factors Used to Project Montana Industry Jobs

SIC Code*	INDUSTRY	Adj. R2**	U.S. Sector Jobs	Montana Population	Time	Montana Building Construction	U.S. Sector Growth Rate	Other Variables	Dummy Variable	Other Methodological Comments***
637	Pension, Health & Welfare Funds						X			
639	Other Insurance Carriers						X			
64	INSURANCE AGENTS & BROKERS									
641	Insurance Agents, Brokers	0.94	X							1972+, U.S. employment only available 1972+
65	REAL ESTATE									
651	Real Estate Operators	0.96		X					X	Dummy variable 1995-98
653	Real Estate Agents & Brokers	0.96		X					X	Dummy variable for 1994-98
654	Title Abstract Offices	0.57		X					X	Dummy variable for 1993-98
655	Subdividers & Developers	0.83		X						
67	HOLDING & OTHER INVESTMENT OFFICES									
671	Offices of Holding Companies	0.96	X						X	1972+, U.S. jobs series 1972+, dummy variable for 1988-98 because of reclassification
672	Investment Offices						X			
673	Educational Foundations & Trusts	0.64			X					1990+ because of reclassification or restructuring
679	Patent Owners/Lessors & Other Investing	0.24			X					1989+ because of reclassification
	OTHER PRIVATE SERVICES									
70	LODGING PLACES									
701	Hotels & Motels	0.93		X						
702	Rooming & Boarding Houses						X			
703	Camps & Recreational Vehicle Parks	0.87	X							1982+
704	Fraternity/Sorority Houses & Other Organization Lodging						X			
72	PERSONAL SERVICES									
721	Laundry, Cleaning & Garment Services	0.60		X						1983+
722	Photographic Studios	0.13		X						1975+ (SIC change)
723	Beauty Shops	0.87			X					1987+, employment peaked in 1987
724	Barber Shops						X			
725	Shoe Repair									Judgmental trend for this tiny sector
726	Funeral Service & Crematories	0.89	X							1972+, U.S. employment only available 1972+
729	Tax Return Preparation & Other Personal Services	0.64		X						1991+
73	BUSINESS SERVICES									
731	Advertising	0.67	X							
732	Credit Reporting, Adjustment & Collection	0.30			X					Used trend cycle time series model
733	Photocopying, Secretarial & Commercial Art Services	0.92	X							1972+, U.S. employment only available 1972+
734	Maintenance & Other Services to Buildings	0.87	X							
735	Equipment Rental	0.97		X						1988 forward (SIC change)
736	Personnel Supply Services	0.93	X							1975+ (SIC change)
737	Computer & Data Processing Services	0.94	X							1975+ (SIC change)
738	Telemarketing & Other Business Services	0.98	X							1985+ (SIC change & data lost before 1984)
75	AUTO REPAIR, RENTAL & OTHER SERVICES									
751	Automotive Rental/Leasing, without Drivers	0.91		X						1975+ (SIC change)
752	Automobile Parking						X			
753	Automotive Repair Shops	0.94		X					X	Dummy variable for 1997-98
754	Quicklubes, Car Washes & Other Auto Services	0.96	X							1975+ (SIC change)
76	OTHER REPAIR SERVICES									
762	Electrical Repair Shops	0.86		X						1975+ (SIC change)
763	Watch, Clock & Jewelry Repair						X			
764	Reupholstery & Furniture Repair	0.89			X					1991+
769	Welding, Small Engine & Other Miscellaneous Repair	0.89	X							1982+
78	MOTION PICTURES									
781	Motion Picture Production	0.91	X						X	MT data available 1975+, dummy variable used for years with large feature films produced
782	Motion Picture Distribution & Services						X			
783	Motion Picture Theaters	0.73	X						X	1972+, U.S. jobs series available 1972+, dummy variable for 1991-98
784	Videotape Rental	0.82		X						1988 forward (SIC change)
79	AMUSEMENT & RECREATIONAL SERVICES									
791	Dance Studios, Schools & Halls						X			
792	Theatrical Producers, Bands, Orchestras	0.88	X							1972+, U.S. employment only available 1972+
793	Bowling Centers									Mean of last 10 years including a 1999 estimate
794	Commercial Sports	0.85		X					X	1982 forward, dummy variable for 1998
799	Gambling, Physical Fitness Facilities, Ski Areas, Other Rec.	0.98	X							1985+, U.S. employment available 1985+
80	HEALTH SERVICES									
801	Offices & Clinics of Medical Doctors	0.97	X							1972+, U.S. jobs series available 1972+, Dummy variable for 1996-98 for restructuring
802	Offices & Clinics of Dentists	0.99	X							1982 forward, U.S. jobs available 1982+
803	Offices of Osteopathic Physicians						X			
804	Offices & Clinics of Other Health Professionals	0.91	X							1975+ (SIC change)

Factors Used to Project Montana Industry Jobs

SIC Code*	INDUSTRY	Adj R2**	U S Sector Jobs	Montane Population	Time	Montana Building Construction	U S Sector Growth Rate	Other Variables	Dummy Variable	Other Methodological Comments***
805	Nursing & Personal Care Facilities	0.97	X							1975+ (SIC change)
806	Private Hospitals	0.99	X							1972+ U.S. employment only available 1972+
807	Medical & Dental Laboratories	0.65	X							1972+ U.S. employment only available 1972+
808	Home Health Care Services	0.99	X							1988 forward (SIC change)
809	Specialty Outpatient Clinics & Other Health Services	0.97	X							1988 forward (SIC change)
81	LEGAL SERVICES									
811	Legal Services	0.99	X							1972+ U.S. employment only available 1972+
82	PRIVATE EDUCATIONAL SERVICES									
821	Private Elementary & Secondary Schools	0.86	X						X	1984+ (data destroyed before 1984), dummy variable for 1998 because of reclassification
822	Private Colleges & Universities	0.88	X							1984+ (data destroyed), noncovered component used a time trend based on 1988-99 history
823	Private Libraries						X			
824	Private Vocational Schools						X			U.S. sector growth rate applied to 2000 estimates after school closures
829	Other Schools & Educational Services	0.87	X							1986+, data before 1984 destroyed
83	SOCIAL SERVICES									
832	Individual & Family Services including Counseling	0.82	X							1988+ (SIC change)
833	Job Training & Vocational Rehabilitation	0.90	X							1975+ (SIC change), presumed noncovered jobs held constant at 275
835	Child Day Care Services	0.97	X							1975+ (SIC change)
836	Homes for the Aged, Children & Other Residential Care	0.89	X						X	1975+ (SIC change), dummy variable for 1998 to account for firm reclassification
839	Human Resource Councils & Other Social Services	0.93	X							1988+ (SIC change)
84	MUSEUMS, ART GALLERIES & ZOOS									
841	Museums & Art Galleries	0.95	X							1985+, U.S. employment available 1985+
842	Botanical & Zoological Gardens						X			
86	MEMBERSHIP ORGANIZATIONS									
861	Business Associations	0.77	X						X	1972+, used dummy variable for last 2 years because of reclassifications in last years
862	Professional Organizations	0.66			X					1982+
863	Labor Organizations	0.95			X					1979+ using the reciprocal of year as the independent variable to flatten downward trend
864	Tribal & Other Civic & Social Associations	0.89	X							1972+, U.S. employment only available 1972+
865	Political Organizations	0.74	X						X	1982+ with dummy variable for election years
866	Religious Organizations	0.79	X							1981+, includes presumed noncovered clergy & lay employees before 1998
869	Other Membership Organizations	0.84	X						X	1984+, dummy variable for 1995-98 after a new large firm opened for business in late 1994
87	ENGINEERING, MANAGEMENT & RESEARCH SERVICES									
871	Engineering & Architectural Services	0.91				X				1981+ using SIC 15 (General Building Construction Contractors) as predictor
872	Accounting, Auditing & Bookkeeping Services	0.90	X							1972+, U.S. employment only available 1972+
873	Research & Testing Services	0.63	X							1988+ (SIC change)
874	Management & Public Relations Services	0.92	X							1988+ (SIC change)
88	PRIVATE HOUSEHOLDS									
881	Private Households	0.95			X					1978+
89	OTHER SERVICES									
899	Other Services	0.53	X							1985+, U.S. employment available 1985+
	GOVERNMENT									
	FEDERAL GOVERNMENT									
431	U.S. Postal Service	0.86	X							Added dummy variable for 1995 shift
	Other Federal Government	0.51	X							1975 forward
	STATE GOVERNMENT									
808	Hospital	0.77			X					Data exist for 1984 forward
82	Education	0.69		X						Data exist for 1976 forward including work-study (presumed noncovered employment)
	Other State Government	0.91	X							Data exist for 1984 forward
	LOCAL GOVERNMENT									
808	Hospitals							X		Data exist for 1976 forward, used Montana private SIC 806 1999-2008 growth rate
82	Education	0.91						X		1982+, enrollment & real per capita income as predictors, includes presumed noncovered jobs
	Other Local Government	0.93		X						Data exist for 1982 forward, includes presumed noncovered jobs (local elected officials)
	SELF-EMPLOYMENT JOBS									
01 & 02	Agricultural Production, Crops & Livestock	0.49			X					1979+
07	Agricultural Services (veterinary, landscape, kennels, other)	0.93			X					Data exist 1982+
08	Forestry (tree farms/timber tracts, nurseries, forestry services)									Average of last 12 years, no significant trend
09	Fishing, Hunting, Trapping & Game Propagation	0.58			X					Data exist 1975+
10-99	Other Nonagricultural Sectors									By subtraction, projected all nonfarm proprietors, 1969+ using a time trend

*Standard Industrial Classification Code

**Measure of the historical fit of the regression line (or plane), adjusted for the length of the historical time period & the number of predictive factors, 1.00 is a perfect fit

***The historical time period when U.S. jobs are used as the predictor is 1964+, unless otherwise noted, the period for other variables is 1961+, unless otherwise noted

Methodology for Montana Occupational Jobs Projections

Employment by Occupation

The main source of occupational information in this publication is the Occupational Employment Statistics (OES) program which surveys Montana's employers over a 3-year period to develop estimated occupational employment by industry type.

The data enables us to build an industry-occupational (I/O) matrix. This I/O matrix is a table arraying the occupational staffing patterns for each industry: i.e., the ratio of employment in each occupation within an industry to the total employment in the industry. For purposes of this report, the OES survey results for 1996-1998 were used to develop industry staffing patterns. Then the staffing patterns were applied to the 1998 base year employment to develop a base year I/O matrix.

Projected Employment by Occupation

Projected employment by occupation is derived by applying the base year I/O matrix to the projected industry employment. Before the I/O matrix is applied it must be modified to take into account those occupations which are expected to undergo technological or structural changes and alter the staffing pattern of those industries in which the occupations are found.

This change factor has been developed by the U.S. Bureau of Labor Statistics and was applied to the base year I/O matrix to obtain an enhanced base year I/O matrix. The enhanced matrix is applied to the projected industry employment.

Job Openings

This publication also provides an estimate of the number of average annual job openings for each listed occupation. The number of job openings is then broken down into component parts of growth and replacements because job opportunities stem either from net employment growth (an increase in demand for workers in a particular occupation) or from replacement demand (the need to replace workers who have left the occupation and/or the labor force).

Average annual job openings due to growth represent the number of new jobs resulting from the projected change in industry employment between the base year and the projected year on an annual basis. Job openings due to replacements differ, though, in that they represent employers' replacement needs. These figures are derived by applying precalculated replacement rates supplied by the U.S. Department of Labor's Bureau of Labor Statistics to the previously determined projected occupational employment.

For most occupations in most states, openings resulting from replacement needs are greater than those generated by increased demand and therefore critical to supplying reliable information many individuals and organizations use to make informed decisions on career choices, educational programs offered and training programs funded.

These replacements occur when people leave the labor force (e.g., retirements, return to school, quitting work to raise children, or death). They also represent the net effect of transfers to new occupations. Replacement rates vary significantly among occupational groups and have been determined as a result of national studies by the Bureau of Labor Statistics.

Wage Rates and Training Levels Required

This publication also includes OES wage rates for occupations, when available—and information about the training level required for each occupation.

Limitation

Using percentages to reflect changes in industrial or occupational employment can at times be misleading. If the base number being used is quite small, large percentage swings are possible. For instance, an occupation may show a startling 100 percent growth rate, but in actuality may have only gone from a base employment of 10 to a projected employment of 20.

Occupational Code, Title and Description

Staff and Administrative Specialty Managerial Occupations

13002 - Financial Managers - Plan, organize, direct, control, or coordinate the financial activities of an organization. Include managers who negotiate general policy with financial or other institutions or managers in banks, or similar financial institutions, who advise on credit and investment policy.

13005 - Personnel, Training, and Labor Relations Managers - Plan, organize, direct, control, or coordinate the personnel, training, or labor relations activities of an organization. Work may involve establishing employer/employee relations policies; directing the selection, training, and evaluation of employees; administering benefits, safety, and recreation programs; developing wage and salary schedules; coordinating collective bargaining activities; and advising on labor contract administration.

13008 - Purchasing Managers - Plan, organize, direct, control, or coordinate the activities of buyers, purchasing officers, and related workers involved in purchasing materials, products, or services. Include Wholesale or Retail Trade Merchandising Managers.

13011 - Marketing, Advertising, and Public Relations Managers - Formulate marketing policies, direct sales activities, and plan, organize, and direct advertising and public relations activities for a department, an entire organization, or on an account basis.

13014 - Administrative Services Managers - Plan, organize, direct, control, or coordinate the supportive services department of a business, agency, or organization. Managers who spend less than 80 percent of their time in administrative services should be classified in another appropriate managerial category. Include Property Managers and Contract Administrators. Exclude Procurement Managers.

13017 - Engineering, Mathematical, and Natural Sciences Managers - Plan, organize, direct, or coordinate activities in such fields as architecture, electronic data processing, engineering, life sciences, physical sciences, statistics, and systems analysis. These persons spend the greatest portion of their time in managerial work for which a background consistent with that described for engineers, mathematicians, or natural scientists is required.

Line and Middle Management Industry Specific Managerial Occupations

15002 - Postmasters and Mail Superintendents - Direct and coordinate operational, administrative, management, and supportive services of a U.S. post office; or coordinate activities of workers engaged in postal and related work in assigned post office.

15005 - Education Administrators - Plan, organize, direct, control, or coordinate the educational activities of colleges and universities; elementary, secondary, or postsecondary schools; vocational or technical schools; or training and instructional organizations (or programs) in private business or other agencies.

15008 - Medicine and Health Services Managers - Plan, organize, direct, control, or coordinate medicine and health services in establishments such as hospitals, clinics, or similar organizations.

15011 - Property and Real Estate Managers and Administrators - Plan, organize, direct, control, or coordinate buying, selling, or leasing activities of real estate properties for clients or employer. Include managers of rented or leased housing units, buildings, or land (including rights-of-way). Exclude workers whose duties are not primarily managerial. Workers who are engaged primarily in direct buying, selling, or renting of real estate should be reported as Sales Workers.

15014 - Industrial Production Managers - Plan, organize, direct, control, or coordinate the work activities and resources necessary for manufacturing products in accordance with cost, quality, and quantity specifications.

15017 - Construction Managers - Plan, organize, direct, control, or coordinate, usually through subordinate supervisory personnel, activities concerned with the construction and maintenance of structures, facilities, and systems. Include specialized construction fields such as carpentry or plumbing. General Managers of large construction contracting firms should be reported as General Managers and Top Executives.

15021 - Mining, Quarrying, and Oil and Gas Well Drilling Managers - Plan, organize, direct, control, or coordinate, usually through subordinate supervisory personnel, the operations of mines, quarries, oil or gas wells, or other similar operations that extract natural deposits.

15023 - Communications, Transportation, and Utilities Operations Managers - Plan, organize, direct, control, or coordinate activities related to: Communications by telephone, telegraph, radio, or television; transporting people or goods by air, highway, railway, water, or pipeline; managing transportation facilities, such as airports, harbors, or terminals; managing warehousing and storage facilities; or supplying electricity, gas, water, steam, or sanitation services. General Managers of large establishments or operations should be reported as General Managers and Top Executives.

15026 - Food Service and Lodging Managers - Plan, organize, direct, control, or coordinate activities of an organization or department that serves food and beverages and/or provides lodging and other accommodations. Include Food and Beverage Directors.

Other Managerial and Administrative Occupations

19002 - Public Administration Chief Executives, Legislators, and General Administrators - Formulate and establish government policy and develop federal, state, or local laws, rules, and regulations. General Administrators who do not have overall responsibility for the state or a local government entity (e.g., county, city, town, or township) should be reported as General Managers and Top Executives.

19005 - General Managers and Top Executives - Top and middle managers whose duties and responsibilities are too diverse and general in nature to be classified in any functional or line area of management and administration. These managers generally work through departmental or subordinate executives.

19999 - All Other Managers and Administrators - All other managers and administrators not classified separately above.

Management Support Occupations

Accountants, Auditors, and Other Financial Specialists

21102 - Insurance Underwriters - Review individual applications for insurance to evaluate degree of risk involved and determine acceptance of applications.

21105 - Credit Analysts - Analyze current credit data and financial statements of individuals or firms to determine the degree of risk involved in extending credit or lending money. Prepare reports with this credit information for use in decision-making.

21108 - Loan Officers and Counselors - Evaluate, authorize, or recommend approval of commercial, real estate, or credit loans. Advise borrowers on financial status and methods of payments. Include Mortgage Loan Officers or Agents, Collection Analysts, and Loan Servicing Officers.

21111 - Tax Preparers - Prepare tax returns for individuals or small businesses but do not have the background or responsibilities of an accredited accountant or certified public accountant. May work for established tax return firm.

21114 - Accountants and Auditors - Examine, analyze, and interpret accounting records for the purpose of giving advice or preparing statements. Install or advise on systems of recording costs or other financial and budgetary data.

21117 - Budget Analysts - Examine budget estimates for completeness, accuracy, and conformance with procedures and regulations. Examine requests for budget revisions, recommend approval or denial, and draft correspondence. Analyze monthly department budgeting and accounting reports for the purpose of maintaining expenditure controls. Provide technical assistance to officials in the preparation of budgets.

21199 - All Other Financial Specialists - All other financial specialists not classified separately above.

Purchasing Agents and Buyers

21302 - Wholesale and Retail Buyers, Except Farm Products - Buy merchandise or commodities (other than farm products) for resale to consumers at the wholesale or retail level, including both durable and nondurable goods. Analyze past buying trends, sales records, price, and quality of merchandise to determine value and yield. Select, order, and authorize payment for merchandise according to contractual agreements. May conduct meetings with sales personnel and introduce new products. Include Assistant Buyers.

21305 - Purchasing Agents and Buyers, Farm Products - Purchase farm products either for further processing or resale. Include Christmas Tree Contractors, Grain Brokers and Market Operators, Grain Buyers, and Tobacco Buyers.

21308 - Purchasing Agents, Except Wholesale, Retail, and Farm Products - Purchase raw or semifinished materials for manufacturing. Purchase machinery, equipment, tools, parts, supplies, or services necessary for the operation of an establishment. Include Contract Specialists, Field Contractors, Purchasers, Price Analysts, Tooling Coordinators, and Media Buyers.

Personnel, Training, Labor Relations Specialists, and Related Occupations

21505 - Special Agents, Insurance - Recruit independent insurance sales agents in field and maintain contact between them and home office. Advise agents on matters pertaining to conduct of business such as cancellations, overdue accounts, technical problems, claims procedures, new business contacts, and new products. May gather information for underwriter.

21508 - Employment Interviewers, Private or Public Employment Service - Interview job applicants in employment office and refer them to prospective employers for consideration. Search application files, notify selected applicants of job openings, and refer qualified applicants to prospective employers. Contact employers to verify referral results. Record and evaluate various pertinent data.

21511 - Personnel, Training, and Labor Relations Specialists - Conduct programs of recruitment, selection, placement, training, promotion, welfare, safety, compensation, or separation of employees. May specialize in specific areas such as labor-management relations, counseling, job analysis, position classification, training, or compensation. Exclude occupations in personnel research and in administration of testing and counseling programs for which a background in psychology is required. Exclude Employment Interviewers, Private or Public Employment Service.

Other Management Support Occupations

21902 - Cost Estimators - Prepare cost estimates for product manufacturing, construction projects, or services, to aid management in bidding on or determining price of product or service. May specialize according to particular service performed or type of product manufactured.

21905 - Management Analysts - Review, analyze, and suggest improvements to business and organizational systems to assist management in operating more efficiently and effectively. Conduct organizational studies and evaluations, design systems and procedures, conduct work simplification and measurement studies, and prepare operations and procedures manuals. Exclude Computer Systems Analysts.

21908 - Construction and Building Inspectors - Inspect new or remodeled construction to determine its soundness and compliance to specifications, building codes, and other regulations. Inspections may be general in nature or may be limited to a specific area, such as electrical systems or elevators.

21921 - Claims Examiners, Property and Casualty Insurance - Review settled insurance claims to determine that payments and settlements have been made in accordance with company practices and procedures, insuring that adjusters have followed proper methods. Report overpayments, underpayments, and other irregularities. Confer with legal counsel on claims requiring litigation.

21999 - All Other Management Support Occupations - All other management support workers not classified separately above.

Engineers

22108 - Mining Engineers, Including Mine Safety - Determine the location and plan the extraction of coal, metallic ores, nonmetallic minerals, and building materials, such as stone and gravel. Work involves conducting preliminary surveys of deposits or undeveloped mines and planning their development; examining deposits or mines to determine whether they can be worked at a profit; making geological and topographical surveys; evolving methods of mining best suited to character, type, and size of deposits; and supervising mining operations.

22111 - Petroleum Engineers - Devise methods to improve oil and gas well production and determine the need for new or modified tool designs. Oversee drilling and offer technical advice to achieve economical and satisfactory progress.

22114 - Chemical Engineers - Design chemical plant equipment and devise processes for manufacturing chemicals and products such as gasoline, synthetic rubber, plastics, detergents, cement, paper, and pulp by applying principles and technology of chemistry, physics, and engineering.

22121 - Civil Engineers, Including Traffic - Perform engineering duties in planning, designing, and overseeing construction and maintenance of structures and facilities such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, power plants, water and sewage systems, and waste disposal units. Include Traffic Engineers who specialize in studying vehicular and pedestrian traffic conditions.

22126 - Electrical and Electronic Engineers - Design, develop, test, and supervise the manufacturing and installation of electrical and electronic equipment, components, or systems for commercial, industrial, military, or scientific use. Exclude Computer Engineers.

22127 - Computer Engineers - Analyze data processing requirements to plan EDP system to provide system capabilities required for projected workloads. Plan layout and installation of new system or modification of existing system. May set up and control analog or hybrid computer systems to solve scientific and engineering problems.

22128 - Industrial Engineers, Except Safety - Perform engineering duties in planning and overseeing the utilization of production facilities and personnel in department or other subdivision of industrial establishment. Plan equipment layout, workflow, and accident prevention measures to maintain efficient and safe utilization of plant facilities. Plan and oversee work, study, and training programs to promote efficient worker utilization. Develop and oversee quality control, inventory control, and production record systems. Exclude Industrial Product Safety Engineers.

22132 - Safety Engineers, Except Mining - Apply knowledge of industrial processes, mechanics, chemistry, psychology, and industrial health and safety laws to prevent or correct injurious products or environmental conditions and mini-

mize effects of human traits or product characteristics that create hazards to life and property or reduce worker morale and efficiency. Include Industrial Product Safety Engineers.

22135 - Mechanical Engineers - Perform engineering duties in planning and designing tools, engines, machines, and other mechanically functioning equipment. Oversee installation, operation, maintenance, and repair of such equipment as centralized heat, gas, water, and steam systems.

22199 - All Other Engineers - All other engineers not classified separately above.

Architects and Surveying and Mapping Scientists

22302 - Architects, Except Landscape and Marine - Plan and design structures, such as private residences, office buildings, theaters, factories, and other structural property.

22308 - Landscape Architects - Plan and design land areas for such projects as parks and other recreational facilities, airports, highways, hospitals, schools, land subdivisions, and commercial, industrial, and residential sites.

22311 - Surveyors and Mapping Scientists - Use surveying, engineering, and scientific data to determine and identify fixed points or boundaries, and prepare maps for legal and design purposes. Provide data relevant to the shape, contour, gravitation, location, or dimension of land or land features for construction, mining, land evaluation, or other purposes.

Engineering and Related Technicians and Technologists

22502 - Civil Engineering Technicians and Technologists - Apply theory and principles of civil engineering in planning, designing and overseeing construction and maintenance of structures and facilities under the direction of engineering staff or physical scientists.

22505 - Electrical and Electronic Engineering Technicians and Technologists - Apply electrical and electronic theory and related knowledge to design, build, test, repair, and modify developmental, experimental, or production electrical equipment in industrial or commercial plants for subsequent use by engineering personnel in making engineering design and evaluation decisions.

22511 - Mechanical Engineering Technicians and Technologists - Apply theory and principles of mechanical engineering to develop and test machinery and equipment under direction of engineering staff or physical scientists.

22514 - Drafters - Prepare working plans and detail drawings from rough or detailed sketches and notes for engineering or manufacturing purposes according to specified dimensions. Utilize knowledge of various machines, engineering practices, mathematics, building materials, and other physical sciences to complete drawings. May use computer-assisted drafting (CAD) equipment and software.

22521 - Surveying and Mapping Technicians - Perform surveying and mapping duties to obtain data pertaining to angles, elevations, points, and contours used for construction, mapmaking, boundary location, mining, or other purposes.

Calculate mapmaking information from field notes using reference tables. Draw maps of geographical areas from source data such as surveying notes, aerial photography, or other maps to show natural and constructed features, political boundaries, and other features. Draw topographical maps from aerial photographs or verify accuracy and completeness of topographical maps. Exclude Surveyors, Cartographers, and Geodesists.

22599 - All Other Engineering and Related Technicians and Technologists - All other engineering and related technicians and technologists not classified separately above.

Natural Scientists and Related Occupations

Physical Scientists

24105 - Chemists, Except Biochemists - Conduct qualitative and quantitative chemical analyses or chemical experiments in laboratories for quality or process control or to develop new products or knowledge.

24108 - Atmospheric and Space Scientists - Investigate atmospheric phenomena and interpret meteorological data gathered by surface and air stations, satellites, and radar to prepare reports and forecasts for public and other uses. Include weather analysts and forecasters who work for radio and TV stations and whose functions require the detailed knowledge of a meteorologist.

24111 - Geologists, Geophysicists, and Oceanographers - **Geologists:** Study composition, structure, and history of the earth's crust; examine rocks, minerals, and fossil remains to identify and determine the sequence of processes affecting the development of the earth; apply knowledge of chemistry, physics, biology, and mathematics to explain these phenomena and to help locate mineral and petroleum deposits and underground water resources; prepare geologic reports and maps; and interpret research data to recommend further study or action. **Geophysicists:** Study physical aspects of the earth, including the atmosphere and hydrosphere; investigate and measure seismic, gravitational, electrical, thermal, and magnetic forces affecting the earth, utilizing principles of physics, mathematics, and chemistry. **Oceanographers:** Study topographical features, rock and sediment of the ocean bottom, and physical aspects of oceans, such as density, temperature, and sound.

24199 - All Other Physical Scientists - All other physical scientists not classified separately above.

Life Scientists

24302 - Foresters and Conservation Scientists - Plan, develop, and control environmental factors affecting forests, rangeland, and farmland and their resources for economic and recreational purposes through activities such as researching soil erosion, conducting fire prevention programs, reforestation, and preservation of natural resources.

24305 - Agricultural and Food Scientists - Research problems related to agriculture, animal husbandry, and horticulture, including the development of improved methods of cultivation, the processing, handling, and storing of products, and related activities.

24308 - Biological Scientists - Research problems dealing with life processes. Include Biologists, Biochemists, Biophysicists, Pathologists, Bacteriologists, Toxicologists, and Zoologists. Exclude Medical and Agricultural Scientists.

Physical and Life Science Technicians and Technologists

24502 - Biological, Agricultural, and Food Technicians and Technologists, Except Health - Assist scientists in laboratory and production activities by performing tasks necessary to experiment, test, and develop new and improved methods in production, preservation, and processing of plant and animal life.

24505 - Chemical Technicians and Technologists, Except Health - Conduct chemical and physical laboratory tests to assist scientists in making qualitative and quantitative analyses of solids, liquids, and gaseous materials for purposes such as research and development of new products or processes, quality control, maintenance of environmental standards, and other work involving experimental, theoretical, or practical application of chemistry and related sciences.

24511 - Petroleum Technicians and Technologists - Assist scientists in the use of electrical, sonic, or nuclear measuring instruments in both laboratory and production activities to obtain data indicating potential sources of metallic ore, gas, or petroleum. Analyze mud and drill cuttings to determine petroleum and mineral content and physical characteristics. Chart pressure, temperature, and other characteristics of oil and gas wells, boreholes, or producing wells. Investigate and collect information concerning oil well drilling operations, geological and geophysical prospecting, and land and lease contracts from other oil fields that lead to the possible discovery of new oil fields.

24599 - All Other Physical and Life Science Technicians and Technologists - All other physical and life science technicians and technologists not classified separately above.

Computer, Mathematical, Operations Research, and Related Occupations

Computer Scientists and Related Occupations

25102 - Systems Analysts, Electronic Data Processing - Analyze business, scientific, and technical problems for application to electronic data processing systems. Exclude persons working primarily as Engineers, Mathematicians, or Scientists.

25103 - Database Administrators - Coordinate physical changes to computer databases and code, test, and implement the database applying knowledge of database management systems. May design logical and physical databases and coordinate database development as part of a project team.

25104 - Computer Support Specialists - Provide technical assistance and training to computer system users. Investigate and resolve computer software and hardware problems of users. Answer clients' inquiries in person and via telephone concerning the use of computer hardware and software, including printing, word processing, programming languages, electronic mail, and operating systems.

25105 - Computer Programmers - Convert project specifications and statements of problems and procedures to detailed logical flowcharts for coding into computer language. Develop and write computer programs to store, locate, and retrieve specific documents, data, and information.

25108 - Computer Programmer Aides - Assist Computer Programmers or Systems Analysts by performing computer-related tasks such as entering completed programs for conversion to machine instructions, writing simple programs to retrieve data, and other duties to assist in the processing of data or controlling of industrial processes.

25199 - All Other Computer Scientists - All other computer scientists not classified separately above.

Mathematical Scientists and Related Occupations

25302 - Operations and Systems Researchers and Analysts, Except Computer - Conduct analyses of management and operational problems in terms of management information and concepts. Formulate mathematical or simulation models of the problem for solution by computer or other method. May develop and supply time and cost networks such as program evaluation and review techniques.

25312 - Statisticians - Plan surveys and collect, organize, interpret, summarize, and analyze numerical data, applying statistical theory and methods to provide usable information in scientific, business, economic, and other fields. Data derived from surveys may represent either complete enumeration or statistical samples. Include Mathematical Statisticians who are engaged in the development of mathematical theory associated with the application of statistical techniques.

25315 - Financial Analysts, Statistical - Conduct statistical analyses of information affecting investment programs of public or private institutions and private individuals.

Social Scientists and Other Social, Recreational, and Religious Occupations

Social Scientists, Including Urban and Regional Planners

27102 - Economists, Including Market Research Analysts - Economists: Conduct research, prepare reports, and formulate plans to aid in solution of economic problems arising from production and distribution of goods and services. Market Research Analysts: Research market conditions in local, regional, or national area to determine potential sales of a product or service; examine and analyze statistical data on past sales and wholesale or retail trade trends to forecast future sales trends.

27105 - Urban and Regional Planners - Develop comprehensive plans and programs for use of land and physical facilities of cities, counties, and metropolitan areas.

27108 - Psychologists - Collect, interpret, and apply scientific data relating to human behavior and mental processes. Activities are in either applied fields of psychology or in basic science fields and research. Include occupations in personnel research and in administration of testing and counseling programs. Exclude Psychiatrists.

27199 - All Other Social Scientists - All other social scientists not classified separately above.

Other Social Science Related Occupations

27302 - Social Workers, Medical and Psychiatric - Counsel and aid individuals and families with problems that may arise during or following the recovery from physical or mental illness by providing supportive services designed to help the persons understand, accept, and follow medical recommendations. Include Chemical Dependency Counselors.

27305 - Social Workers, Except Medical and Psychiatric - Counsel and aid individuals and families requiring social service assistance. Include Community Organization Social Workers who plan, organize, and work with community groups to solve problems. Exclude Chemical Dependency Social Workers.

27307 - Residential Counselors - Coordinate activities for residents of care and treatment institutions, boarding schools, college fraternities or sororities, children homes, or similar establishments. Work includes developing or assisting in the development of program plans for individuals, maintaining household records, and assigning rooms. Counsel residents in identifying and resolving social or other problems. Order supplies and determine need for maintenance, repairs, and furnishings.

27308 - Human Services Workers - Assist Social Group Workers and Case-workers with developing, organizing, and conducting programs to prevent and resolve problems relevant to substance abuse and human relationships. Aid families and clients in obtaining information on the use of social and community services. May recommend additional services. Exclude Residential Counselors and Psychiatric Technicians.

27311 - Recreation Workers - Conduct recreation activities with groups in public, private, or volunteer agencies or recreation facilities. Organize and promote activities such as arts and crafts, sports, games, music, dramatics, social recreation, camping, and hobbies, taking into account the needs and interests of individual members.

Religious Workers

27502 - Clergy - Conduct religious worship and perform other spiritual functions associated with beliefs and practices of religious faith or denomination as delegated by ordinance, license, or other authorization. Provide spiritual and moral guidance and assistance to members.

27505 - Directors, Religious Activities and Education - Direct and coordinate activities of a denominational group to meet religious needs of students. Plan, organize, and direct church school programs designed to promote religious education among church membership. Provide counseling and guidance relative to marital, health, financial, and religious problems.

Lawyers and Related Occupations

28102 - Judges and Magistrates - Judges: Arbitrate, advise, and administer justice in a court of law. Sentence defendant in criminal cases according to statutes of state or federal government. May determine liability of defendant in

civil cases. Magistrates: Adjudicate criminal cases not involving penitentiary sentences and civil cases concerning damages below a sum specified by state law. May issue marriage licenses and perform wedding ceremonies.

28105 - Adjudicators, Hearings Officers, and Judicial Reviewers - Conduct hearings to review and decide claims filed by the government against individuals or organizations, or individual eligibility issues concerning social programs, disability, or unemployment benefits. Determine the existence and the amount of liability; recommend the acceptance or rejection of claims, or compromise settlements according to laws, regulations, policies, and precedent decisions. Confer with persons or organizations involved and prepare written decisions.

28108 - Lawyers - Conduct criminal and civil lawsuits, draw up legal documents, advise clients as to legal rights, and practice other phases of law. May represent client in court or before quasi-judicial or administrative agencies of government. May specialize in a single area of law, such as patent law, corporate law, or criminal law.

Legal Assistants and Technicians, Except Clerical

28302 - Law Clerks - Research legal data for brief or argument based on statutory law or decisions. Search for and study legal records and documents to obtain data applicable to case under consideration. Prepare rough drafts of briefs or arguments. File pleadings for firm with court clerk. Serve copies of pleading on opposing counsel. Prepare affidavits of documents and keep document file and correspondence of cases.

28305 - Paralegal Personnel - Assist lawyers by researching law, investigating facts, and preparing legal documents. May gather research data for use as evidence to formulate defense or to initiate legal action. These workers are career professionals, usually having either a four-year college degree or a degree from an institute specializing in the paralegal profession.

28308 - Title Searchers - Compile list of mortgages, deeds, contracts, judgments, and other instruments (chain) pertaining to title by searching public and private records of real estate or title insurance company.

28311 - Title Examiners and Abstractors - Title Examiners: Search public records and examine titles to determine legal condition of property title. Copy or summarize (abstracts) recorded documents which affect condition of title to property (e.g., mortgages, trust deeds, and contracts). May prepare and issue policy that guarantees legality of title. Abstractors: Summarize pertinent legal or insurance details or sections of statutes or case law from reference books for purpose of examination, proof, or ready reference. Search out titles to determine if title deed is correct.

28399 - All Other Legal Assistants and Technicians, Except Clerical - All other legal assistants and technicians not classified separately above.

Teachers, Educators, Librarians, and Related Occupations

Teachers - College, Junior College, University, Professional School, or Technical Institute

31114 - Nursing Instructors, Postsecondary - Demonstrate and teach patient care in classroom and clinical units to nursing students. Instruct students in principles and application of physical, biological, and psychological subjects related to nursing. Conduct and supervise laboratory experiments. Issue assignments, direct seminars, etc. Participate in planning curriculum with medical and nursing personnel and in evaluating and improving teaching and nursing practices. May specialize in specific subjects, such as anatomy or chemistry, or in a type of nursing activity, such as nursing of surgical patients.

31209 - All Other Physical Sciences Teachers, Postsecondary - Teach courses in the physical sciences, except chemistry and physics. Include teachers of subjects such as astronomy, atmospheric sciences, space sciences, and geology.

31214 - English Language and Literature Teachers, Postsecondary - Teach courses in English language and literature. Include teachers of linguistics, and of comparative literature taught in English.

31218 - Art, Drama, and Music Teachers, Postsecondary - Teach courses in visual and performing arts, such as: cinema, dance, drama, music, painting, sculpture, and theater.

31224 - Mathematical Sciences Teachers, Postsecondary - Teach courses in mathematics, applied mathematics, statistics, and actuarial science.

31226 - Computer Science Teachers, Postsecondary - Teach courses in computer and information science, including computer engineering, computer programming, and information systems theory.

31231 - Anthropology and Sociology Teachers, Postsecondary - Teach courses in anthropology and sociology.

31235 - History Teachers, Postsecondary - Teach courses in human history and historiography.

31242 - Business Teachers, Postsecondary - Teach courses in business administration and management, such as: accounting, finance, human resources, labor relations, marketing, and operations research.

31247 - Social Work Teachers, Postsecondary - Teach courses in social work.

31252 - Education Teachers, Postsecondary - Teach courses pertaining to education, such as: counseling, curriculum, guidance, instruction, teacher education, and teaching English as a second language.

31299 - All Other Postsecondary Teachers - All other postsecondary teachers not elsewhere classified.

Other Teachers and Instructors

31303 - Teachers, Preschool - Instruct children (normally up to 5 years of age) in activities designed to promote social, physical, and intellectual growth needed for primary school in preschool, day care center, or other child development facility. May be required to hold state certification.

31304 - Teachers, Kindergarten - Teach elemental natural and social science, personal hygiene, music, art, and literature to children from 4 to 6 years old. Promote physical, mental, and social development. May be required to hold state certification.

31305 - Teachers, Elementary School - Teach elementary pupils in public or private schools basic academic, social, and other formative skills. Exclude special education teachers of the handicapped.

31308 - Teachers, Secondary School - Instruct students in public or private schools in one or more subjects, such as English, mathematics, or social studies. May be designated according to subject matter specialty, such as Typing Instructors, Commercial Teachers, or English Teachers. Include vocational high school teachers.

31311 - Teachers, Special Education - Teach elementary and secondary school subjects to educationally and physically handicapped students. Include teachers who specialize and work with audibly and visually handicapped students and those who teach basic academic and life processes skills to the mentally retarded.

31314 - Teachers and Instructors, Vocational Education and Training - Teach or instruct vocational and/or occupational subjects at the postsecondary level (but at less than the baccalaureate) to students who have graduated or left high school. Subjects include business, secretarial science, data processing, trades, and practical nursing. Include correspondence school instructors, industrial, commercial and government training instructors, and adult education teachers and instructors who prepare persons to operate industrial machinery and equipment and transportation and communications equipment. Teaching may take place in public or private schools whose primary business is education or in a school associated with an organization whose primary business is other than education.

31317 - Instructors, Nonvocational Education - Teach or instruct out-of-school youths and adults in courses other than those that normally lead to an occupational objective and are less than the baccalaureate level. Subjects may include self-improvement and nonvocational courses such as Americanization, basic education, art, drama, music, bridge, homemaking, stock market analysis, languages, modeling, flying, dancing, and automobile driving. Teaching may take place in public or private schools or in an organization whose primary business is other than education.

31321 - Instructors and Coaches, Sports and Physical Training - Instruct or coach groups or individuals in the fundamentals of sports. Demonstrate techniques and methods of participation. Observe and inform participants of corrective measures necessary to improve their skills. Those required to hold teaching degrees should be reported in the appropriate teaching category.

31399 - All Other Teachers and Instructors - All other teachers and instructors not classified separately above.

Librarians, Archivists, Curators, and Other Education Related Occupations

31502 - Librarians, Professional - Administer libraries and perform related library services. Includes selecting, acquiring, cataloging, classifying, circulating, and maintaining library materials; furnishing reference, bibliographical, and reader's advisory services. May select music, films, or other audiovisual material for programs.

31505 - Technical Assistants, Library - Assist librarians by furnishing information on library sciences, facilities, and rules; by assisting readers in the use of card catalogs and indexes to locate books and other materials; and by answering questions that require only brief consultation of standard reference. May catalog books or train and supervise clerical staff.

31511 - Curators, Archivists, Museum Technicians, and Conservators - Curators: Administer affairs of museum and conduct scientific research programs. Direct instructional, research, and public service activities of institution. Archivists: Appraise, edit, and direct safekeeping of permanent records and historically valuable documents. Participate in research activities based on archival materials. Museum Technicians and Conservators: Prepare specimens such as fossils, skeletal parts, lace, and textiles for museum collection and exhibits. May restore documents or install, arrange, and exhibit materials.

31514 - Vocational and Educational Counselors - Counsel individuals and provide group educational and vocational guidance services.

31517 - Instructional Coordinators - Develop instructional material, coordinate educational content, and incorporate current technology in specialized fields that provide guidelines to educators and instructors for developing curricula and conducting courses. Include Educational Consultants and Specialists, Public Health Educators, and Instructional Material Directors.

31521 - Teacher Aides, Paraprofessional - Perform duties that are instructional in nature or deliver direct services to students and/or parents. Serve in a position for which a teacher or another professional has ultimate responsibility for the design and implementation of educational programs and services.

Health Practitioners, Technologists, Technicians, and Related Health Occupations

Health Diagnosing and Treating Practitioners

32102 - Physicians and Surgeons - Doctors of medicine who diagnose and treat mental or physical disorders. May specialize in one field such as surgery, obstetrics, or psychiatry.

32105 - Dentists - Diagnose and treat diseases, injuries, and malformations of teeth, gums, and related oral structures.

32108 - Optometrists - Diagnose, manage, and treat conditions and diseases of the human eye and visual system. Examine eyes to determine visual efficiency and performance by use of instruments and observation. Prescribe corrective procedures.

32114 - Veterinarians and Veterinary Inspectors - Diagnose and treat diseases and dysfunction of animals. May engage in a particular function such as research and development, consultation, administration, technical writing, sale or production of commercial products, or rendering of technical services to commercial firms or other organizations. Include Veterinary Inspectors.

32199 - All Other Health Diagnosing and Treating Practitioners - All other health diagnosing and treating practitioners not classified separately above.

Therapists

32302 - Respiratory Therapists - Provide assessment, diagnostic evaluation, treatment, and care for patients with breathing disorders. Assume primary responsibility for all respiratory care modalities, including the supervision of respiratory therapy technicians. Initiate and conduct therapeutic procedures; maintain patient records; and select, assemble, check, and operate equipment.

32305 - Occupational Therapists - Plan, organize, and participate in medically oriented occupational programs in hospital or similar institution to rehabilitate patients who are physically or mentally ill.

32308 - Physical Therapists - Assess, plan, organize, and participate in rehabilitative programs that improve mobility, relieve pain, increase strength, and decrease or prevent deformity of patients suffering from disease or injury.

32314 - Speech-Language Pathologists and Audiologists - Examine and provide remedial services for persons with speech and hearing disorders. Perform research related to speech and language problems.

32317 - Recreational Therapists - Plan, organize, and direct medically approved recreation programs for patients in hospitals, nursing homes, or other institutions. Activities include sports, trips, dramatics, social activities, and arts and crafts.

32399 - All Other Therapists - All other therapists not classified separately above.

Health Care Maintenance and Treating Occupations

32502 - Registered Nurses - Administer nursing care to ill or injured persons. Licensing or registration required. Include administrative, public health, industrial, private duty, and surgical nurses.

32505 - Licensed Practical Nurses - Care for ill, injured, convalescent, and handicapped persons in hospitals, clinics, private homes, sanitariums, and similar institutions.

32508 - Emergency Medical Technicians - Administer first aid treatment and transport sick or injured persons to medical facility, working as a member of an emergency medical team.

32511 - Physician's Assistants - Provide patient services under direct supervision and responsibility of doctor of medicine or osteopathy. Elicit detailed patient histories and make complete physical examinations. Reach tentative diagnosis and order appropriate laboratory tests. Require substantial educational preparation, usually at junior or 4-year colleges. Most physician assistants complete 2 years of formal training, but training may vary from 1 to 5 years depending on

the nature of the training and previous education and experience. May require certification. Exclude Ambulance Attendants, whose training is limited to the application of first aid, and Nurses.

32514 - Opticians, Dispensing and Measuring - Design, measure, fit, and adapt lenses and frames for client according to written optical prescription or specification. Assist client with selecting frames. Measure customer for size of eyeglasses and coordinate frames with facial and eye measurements and optical prescription. Prepare work order for optical laboratory containing instructions for grinding and mounting lenses in frames. Verify exactness of finished lens spectacles. Adjust frame and lens position to fit client. May shape or reshape frames. Include Contact Lens Opticians.

32517 - Pharmacists - Compound and dispense medications following prescriptions issued by physicians, dentists, or other authorized medical practitioners.

32519 - Pharmacy Technicians & Aides - Fill orders for unit doses and prepackaged pharmaceuticals and perform other related duties under the supervision and direction of a pharmacy supervisor or staff pharmacist. Duties include keeping records of drugs delivered to the pharmacy, storing incoming merchandise in proper locations, and informing the supervisor of stock needs and shortages. May clean equipment used in the performance of duties and assist in the care and maintenance of equipment and supplies. May operate cash register and accept prescriptions for filling.

32521 - Dietitians and Nutritionists - Organize, plan, and conduct food service or nutritional programs to assist in promotion of health and control of disease. May administer activities of department providing quantity food service. May plan, organize, and conduct programs in nutritional research.

32523 - Dietetic Technicians - Under direct supervision of Dietitians, or following established nutritional guidelines, advise on food or nutrition.

Other Health Professionals, Paraprofessionals, and Technicians

32902 - Medical and Clinical Laboratory Technologists - Perform a wide range of complex procedures in the general area of the clinical laboratory or perform specialized procedures in such areas as cytology, histology, and microbiology. Duties may include supervising and coordinating activities of workers engaged in laboratory testing. Include workers who teach medical technology when teaching is not their primary activity.

32905 - Medical and Clinical Laboratory Technicians - Perform routine tests in medical laboratory for use in treatment and diagnosis of disease. Prepare vaccines, biologicals, and serums for prevention of disease. Prepare tissue samples for Pathologists, take blood samples, and execute such laboratory tests as urinalysis and blood counts. May work under the general supervision of a Medical Laboratory Technologist.

32908 - Dental Hygienists - Perform dental prophylactic treatments and instruct groups and individuals in the care of the teeth and mouth.

32911 - Medical Records Technicians - Compile and maintain medical records of hospital and clinic patients.

32913 - Radiation Therapists - Provide radiation therapy to patients as prescribed by a radiologist according to established practices and standards. Duties may include reviewing prescription and diagnosis; acting as liaison with physician and supportive care personnel; preparing equipment, such as immobilization, treatment, and protection devices; and maintaining records, reports, and files. May assist in dosimetry procedures and tumor localization.

32914 - Nuclear Medicine Technologists - Prepare, administer, and measure radioactive isotopes in therapeutic, diagnostic, and tracer studies utilizing a variety of radioisotope equipment. Prepare stock solutions of radioactive materials and calculate doses to be administered by Radiologists. Subject patients to radiation. Execute blood volume, red cell survival, and fat absorption studies following standard laboratory techniques.

32919 - Radiologic Technologists - Take X-rays and CAT scans or administer nonradioactive materials into patient's bloodstream for diagnostic purposes. Include technologists who specialize in other modalities such as computed tomography, ultrasound, and magnetic resonance. Include workers whose primary duties are to demonstrate portions of the human body on X-ray film or fluoroscopic screen.

32925 - Cardiology Technologists - Conduct tests on pulmonary and/or cardiovascular systems of patients for diagnostic purposes. May conduct or assist in electrocardiograms, cardiac catheterizations, and pulmonary-function, lung capacity and similar tests.

32928 - Surgical Technologists and Technicians - Perform any combination of the following tasks either before, during, or after an operation: Prepare patient by washing, shaving, etc.; place equipment and supplies in operating room according to surgeon's instruction; arrange instruments under direction of nurse; maintain specified supply of fluids for use during operation; adjust lights and equipment as directed; hand instruments and supplies to surgeon, hold retractors, and cut sutures as directed; count sponges, needles, and instruments used during operation; and clean operating room.

32931 - Psychiatric Technicians - Provide nursing care to mentally ill, emotionally disturbed, or mentally retarded patients. Participate in rehabilitation and treatment programs. Help with personal hygiene. Administer oral medications and hypodermic injections, following physician's prescriptions and hospital procedures. Monitor patient's physical and emotional well-being and report to medical staff.

32951 - Veterinary Technicians and Technologists - Perform medical tests in a laboratory environment for use in the treatment and diagnosis of diseases in animals. Prepare vaccines and serums for prevention of diseases. Prepare tissue samples, take blood samples, and execute laboratory tests such as urinalysis and blood counts. Clean and sterilize instruments and materials and maintain equipment and machines.

32999 - All Other Health Professionals, Paraprofessionals, and Technicians - All other health professionals, paraprofessionals, and technicians not classified separately above.

Writers, Artists, Entertainers, Athletes, and Related Occupations

34002 - Writers and Editors - Writers: Originate and prepare written material such as scripts, stories, news items, advertisements, and other material. Editors: Coordinate, edit, and analyze prepared written material. Include Managing Editors. Exclude Publicity Writers, Public Relations Specialists, Technical Writers, and Technical Editors.

34005 - Technical Writers and Editors - Write or edit technical materials, such as equipment manuals, appendices, and operating and maintenance instructions. May oversee preparation of illustrations, photographs, diagrams, and charts; and assist in layout work.

34008 - Public Relations Specialists and Publicity Writers - Engage in promoting or creating goodwill for individuals, groups, or organizations by writing or selecting favorable publicity material and releasing it through various communications media. Prepare and arrange displays, make speeches, and perform related publicity efforts.

34011 - Reporters and Correspondents - Collect and analyze facts about newsworthy events by interview, investigation, or observation. Report and write stories for newspaper, news magazine, radio, or television. Exclude correspondents who broadcast news for radio and television.

34014 - Broadcast News Analysts - Analyze, interpret, and broadcast news received from various sources.

34017 - Announcers, Radio and Television - Introduce various types of radio or television programs, interview or question guests, or act as master of ceremonies. Read news flashes and identify station by giving call letters.

34023 - Photographers - Photograph persons, subjects, merchandise, or other commercial products. May develop negatives and produce finished prints. Include Scientific Photographers, Aerial Photographers, and Photojournalists.

34026 - Camera Operators, Television and Motion Picture - Operate television or motion picture camera to photograph scenes for TV broadcasts, advertising, or motion pictures.

34028 - Broadcast Technicians - Set up, operate, and maintain the electronic equipment used to transmit radio and television programs. Control audio equipment to regulate volume level and quality of sound during radio and television broadcasts. Operate radio transmitter to broadcast radio and television programs. An FCC first class operator's license is usually required for this occupation. A few typical broadcast technician workers include: Audio Operators, Video Operators, Control Room Technicians, Transmitter Operators, Master-Control Engineers, Telecine Operators.

34035 - Artists and Related Workers - Design and execute artwork to illustrate subject matter; promote public consumption of materials, products, or services; or to influence others in their opinions of individuals or organizations. Include Graphic Designers, Commercial Artists, Artistic Painters, Art Directors, and Painting Restorers.

34038 - Designers, Except Interior Designers - Design or arrange objects and materials to achieve artistic or decorative effects for apparel or other commercial items. May also create, mark out, or draw designs for items such as furniture and machinery (product design). Designers are generally categorized according to articles or products designed, such as Clothes Designers, Industrial Designers, or according to type of design work, such as Embroidery Designers. Include Layout Artists.

34041 - Interior Designers - Plan, design, and furnish interiors of residential, commercial, or industrial buildings. Formulate design which is practical, aesthetic and conducive to intended purposes, such as raising productivity, selling merchandise, or improving life style. May specialize in a particular field, style, or phase of interior design. Exclude Merchandise Display Designers.

34044 - Merchandise Displayers and Window Trimmers - Plan and erect commercial displays, such as those in windows and interiors of retail stores and at trade exhibitions.

34047 - Music Directors, Singers, Composers, and Related Workers - Conduct, direct, plan, and lead instrumental or vocal performances by musical groups, such as orchestras, choirs, and glee clubs. Include workers who entertain by singing songs on stage, radio, television, or in motion pictures. Include Arrangers, Composers, and Orchestrators.

34051 - Musicians, Instrumental - Play one or more musical instruments in recital, in accompaniment, or as members of an orchestra, band, or other musical group.

34056 - Producers, Directors, Actors, and other Entertainers - Produce, direct, or play parts in stage, television, radio, or motion picture productions for entertainment, information, or instruction.

Other Professional, Paraprofessional, and Technical Occupations

39002 - Airplane Dispatchers and Air Traffic Controllers - Control air traffic on and within vicinity of airport and movement of air traffic between altitude sectors and control centers according to established procedures and policies. Authorize, regulate, and control commercial airline flights according to government or company regulations to expedite and insure flight safety.

39008 - Radio Operators - Receive and transmit communications using radio-telegraph or radiotelephone equipment in accordance with government regulations. May repair equipment.

39011 - Funeral Directors and Morticians - Perform various tasks to arrange and direct funeral services, such as coordinating transportation of body to mortuary for embalming, interviewing family or other authorized person to arrange details, selecting pallbearers, procuring official for religious rites, and providing transportation for mourners. Exclude top and middle managers whose duties are primarily policy making, planning, and administrative in nature and report them as General Managers or in another appropriate managerial occupation.

39999 - All Other Professional, Paraprofessional, and Technical Workers - All other professional, paraprofessional, and technical workers not classified separately above.

First-Line Supervisors and Managers/Supervisors

41002 - First-Line Supervisors and Managers/Supervisors - Sales and Related Workers - Directly supervise and coordinate activities of marketing, sales, and related workers. May perform management functions, such as budgeting, accounting, marketing, and personnel work, in addition to their supervisory duties.

Sales Occupations, Services

43002 - Sales Agents and Placers, Insurance - Sell life, endowments, fire, accident, and other types of insurance. May refer clients to independent brokers, work as independent broker, or be employed by an insurance company.

43005 - Brokers, Real Estate - Sell real estate, rent and manage properties, and arrange for loans while managing and operating real estate office.

43008 - Sales Agents, Real Estate - Rent, buy, and sell property to clients. Perform duties such as studying property listings, interviewing prospective clients, accompanying clients to property site, discussing conditions of sale, and drawing up real estate contracts.

43011 - Appraisers, Real Estate - Appraise real property to determine its value for purchase, sales, investment, mortgage, or loan purposes.

43014 - Sales Agents, Securities, Commodities, and Financial Services - Buy and sell securities in investment and trading firms, or call upon businesses and individuals to sell financial services. Provide financial services, such as loan, tax, and securities counseling. May advise securities customers about such things as stocks, bonds, and market conditions.

43017 - Sales Agents, Selected Business Services - Sell selected services, such as building maintenance, credit reporting, bookkeeping, security, printing, and storage space, to businesses. Exclude advertising, insurance, financial, and real estate sales agents.

43021 - Travel Agents - Plan trips for travel agency customers. Duties include determining destination, modes of transportation, travel dates, costs, accommodations required, and planning, describing, or selling itinerary package tours. May specialize in foreign or domestic service, individual or group travel, specific geographical area, airplane charters, or package tours.

43023 - Sales Agents, Advertising - Sell or solicit advertising. Sell things such as graphic art, advertising space in publications, custom-made signs, or TV and radio advertising time. May obtain leases for outdoor advertising sites or persuade retailer to use sales promotion display items.

43099 - All Other Sales Representatives and Salespersons, Services - All other services sales representatives and salespersons not classified separately above.

Merchandise, Products, and Other Sales and Sales-Related Occupations

49005 - Sales Representatives, Scientific and Related Products and Services, Except Retail - Sell goods or services requiring scientific or similar knowledge in such areas as biology, engineering, chemistry, and electronics, normally obtained from 2 or 3 years of postsecondary education or its equivalent. Sell products such as aircraft, agricultural equipment and supplies, industrial machinery, medical supplies, electronic equipment, chemicals, and precision instruments. Exclude Sales Engineers whose background or equivalent knowledge is equal to a baccalaureate degree in engineering.

49008 - Sales Representatives, Except Retail and Scientific and Related Products and Services - Sell goods or services for wholesalers or manufacturers to businesses or groups of individuals. Solicit orders from established clients or secure new customers. Work requires substantial knowledge of items sold.

49011 - Salespersons, Retail - Sell to the public any of a wide variety of merchandise, such as furniture, motor vehicles, appliances, or apparel. Include workers who sell less expensive merchandise where knowledge of the item sold is not a primary requirement. Exclude Cashiers.

49014 - Salespersons, Parts - Sell spare and replaceable parts and equipment from behind counter in agency, repair shop, or parts store. Determine make, year, and type of part needed by observing damaged part or listening to a description of malfunction. Read catalogue to find stock number, price, etc., and fill customer's order from stock. Exclude workers whose primary responsibilities are to receive, store, and issue materials, equipment, and other items from stockroom.

49017 - Counter and Rental Clerks - Receive orders for services, such as rentals, repairs, dry-cleaning, and storage. May compute cost and accept payment.

49021 - Stock Clerks, Sales Floor - Receive, store, and issue sales floor merchandise. Stock shelves, racks, cases, bins, and tables with merchandise and arrange merchandise displays to attract customers. May periodically take physical count of stock or check and mark merchandise.

49023 - Cashiers - Receive and disburse money in establishments other than financial institutions. Usually involves use of adding machines, cash registers, or change makers. May also include processing credit card transactions.

49026 - Telemarketers, Door-To-Door Sales Workers, News and Street Vendors, and Other Related Workers - Solicit orders for goods or services over the telephone; sell goods or services door-to-door or on the street.

49034 - Demonstrators and Promoters - Demonstrate merchandise and answer questions for the purpose of creating public interest in buying the product. May sell demonstrated merchandise.

49999 - All Other Sales and Related Workers - All other sales and related workers not classified separately above.

First-Line Supervisors and Managers/Supervisors

51002 - First-Line Supervisors and Managers/Supervisors - Clerical and Administrative Support Workers - Directly supervise and coordinate activities of

clerical and administrative support workers. Managers/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work, and may also engage in the same clerical work as the workers they supervise.

Industry Specific Clerical and Administrative Support Occupations

Banking, Security, Finance, and Credit Occupations

53102 - Tellers - Receive and pay out money. Keep records of money and negotiable instruments involved in a financial institution's various transactions.

53105 - New Accounts Clerks - Interview persons desiring to open bank accounts. Explain banking services available to prospective customers and assist them in preparing application form.

53111 - Loan Interviewers - Interview loan applicants to elicit information; investigate applicant's background and verify references; prepare loan request papers; forward findings, reports, and documents to appraisal department.

53117 - Credit Checkers - Investigate history and credit standing of individuals or business establishments applying for credit. Telephone or write to credit departments of business and service establishments to obtain information about applicant's credit standing.

53121 - Loan and Credit Clerks - Assemble documents, prepare papers, process applications, and complete transactions of individuals applying for loans and credit. **Loan Clerks:** Review loan papers to insure completeness; operate typewriters, word processors, or personal computers to prepare correspondence, reports, and loan documents from draft; and complete transactions between loan establishment, borrowers, and sellers upon approval of loan. **Credit Clerks:** Interview applicants to obtain personal and financial data; determine credit worthiness; process applications; and notify customer of acceptance or rejection of credit. Exclude Loan Interviewers.

53123 - Adjustment Clerks - Investigate and resolve customers' inquiries concerning merchandise, service, billing, or credit rating. Examine pertinent information to determine accuracy of customers' complaints and responsibility for errors. Notify customers and appropriate personnel of findings, adjustments, and recommendations, such as exchange of merchandise, refund of money, credit to customers' accounts, or adjustment to customers' bills.

53126 - Statement Clerks - Prepare and distribute bank statements to customers, answer inquiries, and reconcile discrepancies in records and accounts.

53128 - Brokerage Clerks - Perform clerical duties involving the purchase or sale of securities. Duties include writing orders for stock purchases and sales, computing transfer taxes, verifying stock transactions, accepting and delivering securities, informing customers of stock price fluctuations, computing equity, distributing dividends, and keeping records of daily transactions and holdings.

Insurance Occupations

53302 - Insurance Adjusters, Examiners, and Investigators - Investigate, analyze, and determine the extent of insurance company's liability concerning

personal, casualty, or property loss or damages, and attempt to effect settlement with claimants. Correspond with or interview medical specialists, agents, witnesses, or claimants to compile information. Calculate benefit payments and approve payment of claims within a certain monetary limit. Exclude Insurance Sales Agents, Insurance Policy Process Clerks, and Claims Clerks.

53311 - Insurance Claims Clerks - Obtain information from insured or designated persons for purpose of settling claim with insurance carrier.

53314 - Insurance Policy Processing Clerks - Process applications for, changes to, reinstatement of, and cancellation of insurance policies. Duties include reviewing insurance applications to insure that all questions have been answered, compiling data on insurance policy changes, changing policy records to conform to insured party's specifications, compiling data on lapsed insurance policies to determine automatic reinstatement according to company policies, canceling insurance policies as requested by agents, and verifying the accuracy of insurance company records. Exclude Insurance Claims Clerks and Banking Insurance Clerks.

Investigative and Related Occupations, Except Insurance

53508 - Bill and Account Collectors - Locate and notify customers of delinquent accounts by mail, telephone, or personal visit to solicit payment. Duties include receiving payment and posting amount to customer's account; preparing statements to credit department if customer fails to respond; initiating repossession proceedings or service disconnection; keeping records of collection and status of accounts. Exclude workers who collect money from coin boxes.

Municipal and Related Occupations

53702 - Court Clerks - Perform clerical duties in court of law; prepare docket of cases to be called; secure information for judges; and contact witnesses, attorneys, and litigants to obtain information for court.

53705 - Municipal Clerks - Draft agendas and bylaws for town or city council; record minutes of council meetings; answer official correspondence; keep fiscal records and accounts; and prepare reports on civic needs.

Lodging and Travel Occupations

53802 - Travel Clerks - Provide tourists with travel information, such as points of interest, restaurants, rates, and emergency service. Duties include answering inquiries, offering suggestions, and providing literature pertaining to trips, excursions, sporting events, concerts and plays. May make reservations, deliver tickets, arrange for visas, or contact individuals and groups to inform them of package tours. Exclude Travel Agents.

53805 - Reservation and Transportation Ticket Agents - Make and confirm reservations for passengers and sell tickets for transportation agencies such as airlines, bus companies, railroads, and steamship lines. May check baggage and direct passengers to designated concourse, pier, or track. Exclude workers selling tickets for subways, city buses, ferryboats, and street railways.

53808 - Hotel Desk Clerks - Accommodate hotel patrons by registering and assigning rooms to guests, issuing room keys, transmitting and receiving mes-

sages, keeping records of occupied rooms and guests' accounts, making and confirming reservations, and presenting statements to and collecting payments from departing guests.

Other Industry Specific Occupations

53902 - Library Assistants and Bookmobile Drivers - Library Assistants: Compile records; sort and shelve books; issue and receive library materials, such as books, pictures, cards, slides, audio and video recordings, and microfilm. Locate library materials for loan and replace materials in shelving area (stacks) or files according to identification number and title. Register patrons to permit them to borrow books, periodicals, and other library materials. **Bookmobile Drivers:** Operate a bookmobile or light truck that pulls a book trailer to specific locations on a predetermined schedule and assist with providing services in mobile library.

53905 - Teacher Aides and Educational Assistants, Clerical - Arrange work materials, supervise students at play, and operate audiovisual equipment under guidance of a teacher.

53908 - Advertising Clerks - Receive orders for classified advertising in a newspaper or magazine from customers in person or by telephone. Examine and mark classified advertisements according to copy sheet specifications to guide composing room in assembling type. Verify conformance of published advertisements to specifications for billing purposes.

53914 - Real Estate Clerks - Perform duties concerned with rental, sale, and management of real estate, such as typing copies of listings, computing interest or penalty owed, holding collateral in escrow, and checking due notices on taxes and renewal dates of insurance and mortgage loans.

Secretarial and General Office Occupations

Secretaries

55102 - Legal Secretaries - Prepare legal papers and correspondence, such as summonses, complaints, motions, and subpoenas. May review law journals and other legal publications to identify court decisions pertinent to pending cases and submit articles to company officials. Must be familiar with legal terminology, procedures, and documents, as well as legal research.

55105 - Medical Secretaries - Perform secretarial duties utilizing specific knowledge of medical terminology and hospital, clinic, or laboratory procedures. Duties include taking dictation; and compiling and recording medical charts, reports, and correspondence using a typewriter, word processor, or personal computer. Duties may also include preparing and sending bills to patients or recording appointments.

55108 - Secretaries, Except Legal and Medical - Relieve officials of clerical work and minor administrative and business details by scheduling appointments, giving information to callers, taking dictation, composing and typing routine correspondence (using typewriter or word processor), reading and routing incoming mail, filing correspondence and other records, and other assigned clerical duties.

Other Secretarial Related and General Office Occupations

55302 - Stenographers and/or Court Reporters - Use shorthand or speedwriting notes to take dictation, record correspondence, reports, court testimony, examinations, instructions, or other material and transcribes the recorded material.

55305 - Receptionists and Information Clerks - Answer inquiries and obtain information for general public (e.g., customers, visitors, and other interested parties). Provide information regarding activities conducted at establishment: location of departments, offices, and employees within organization; or services in a hotel. May perform other clerical duties as assigned. Exclude Receptionists who operate switchboards.

55307 - Typists, Including Word Processing - Use typewriter or word processing equipment to type letters, reports, forms, or other straight copy material from rough draft, corrected copy, or voice recording. May perform other clerical duties as assigned. Exclude Key punchers, Secretaries, and Stenographers.

55314 - Personnel Clerks, Except Payroll and Timekeeping - Compile and keep personnel records. Record data for each employee, such as address, weekly earnings, absences, amount of sales or production, supervisory reports on ability, and date of and reason for termination. Compile and type reports from employment records. File employment records. Search employee files and furnish information to authorized persons.

55321 - File Clerks - File correspondence, cards, invoices, receipts, and other records in alphabetical or numerical order or according to the filing system used. Locate and remove material from file when requested. May be required to classify and file new material.

55323 - Order Clerks, Materials, Merchandise, and Service - Receive and process incoming orders for materials, merchandise, or services such as repairs, installations, or rental of facilities. Duties include informing customers of order receipt, prices, shipping dates, and delays; preparing contracts; and handling complaints. Exclude workers who dispatch as well as take orders for services.

55326 - Procurement Clerks - Compile information and records to draw up purchase orders for procurement of materials.

55328 - Statistical Clerks - Compile and compute data according to statistical formulas for use in statistical studies. May perform actuarial computations using algebra and trigonometry and compile charts and graphs for use by Actuaries. Include Actuarial Clerks.

55332 - Interviewing Clerks, Except Personnel and Social Welfare - Interview public to obtain information. Contact persons by telephone, mail, or in person for the purpose of completing forms, applications, or questionnaires. Ask specific questions, record answers, and assist persons with completing form. May sort, classify, and file forms. Exclude workers whose primary duty is processing applications.

55335 - Customer Service Representatives, Utilities - Interview applicants for water, gas, electric, or telephone service. Talk with customer by phone or in person and receive orders for installation, turn-on, discontinuance, or change in services.

55338 - Bookkeeping, Accounting, and Auditing Clerks - Compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. May also check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers.

55341 - Payroll and Timekeeping Clerks - Compile and post employee time and payroll data. May compute time worked by employees, worker's production, commission, etc.; computes and posts wages and deductions; may prepare paychecks.

55344 - Billing, Cost, and Rate Clerks - Compile data, compute fees and charges, and prepare invoices for billing purposes. Duties include computing costs and calculating rates for goods, services, and shipment of goods; posting data; and keeping other relevant records. May involve use of typewriters, calculators, adding and bookkeeping machines, word processors, or personal computers. Exclude workers whose primary duty is operation of special office machines or workers who calculate charges for passenger transportation.

55347 - General Office Clerks - Perform duties too varied and diverse to be classified in any specific office clerical occupation. Clerical duties may be assigned in accordance with the office procedures of individual establishments and may include a combination of bookkeeping, typing, stenography, office machine operation, and filing.

Electronic Data Processing and Other Office Machine Occupations

56002 - Billing, Posting, and Calculating Machine Operators - Operate machines that automatically perform mathematical processes, such as addition, subtraction, multiplication, and division, to calculate and record billing, accounting, statistical, and other numerical data. Duties include operating special billing machines to prepare statements, bills, and invoices, and operating bookkeeping machines to copy and post data, make computations, and compile records of transactions.

56005 - Duplicating Machine Operators - Operate one of a variety of office machines such as photocopying, photographic, mimeograph, and duplicating machines to make copies. Exclude blueprinting machine operators and operators of offset printing machines and presses.

56008 - Mail Machine Operators, Preparation and Handling - Operate machines that: Emboss names, addresses, and other matter onto metal plates for use in addressing machines; print names, addresses, and similar information onto items such as envelopes, accounting forms, and advertising literature; address, fold, stuff, seal, and stamp mail; and open envelopes. Exclude workers who prepare incoming and outgoing mail for distribution by hand.

56011 - Computer Operators, Except Peripheral Equipment - Monitor and control electronic computer to process business, scientific, engineering, and other data according to operating instructions. Exclude operators who control peripheral equipment only.

56014 - Peripheral EDP Equipment Operators - Operate computer peripheral equipment, such as tape or disk drives, printers, card-to-tape or tabulating machines, sorters, or interpreters. Exclude Computer Operators and Data Entry Keyers.

56017 - Data Entry Keyers, Except Composing - Operate keyboard or other data entry devices to prepare data processing input on cards, disk, or tape. Duties include coding and verifying alphabetic or numeric data.

56099 - All Other Office Machine Operators - All other office machine operators not classified separately above.

Communications, Mail, and Message Distributing Occupations

Communications Equipment Operators

57102 - Switchboard Operators - Operate cord or cordless switchboard to relay incoming, outgoing, and interoffice calls. May supply information to callers and record messages. May also act as receptionist, perform routine clerical work, and type.

Mail and Message Distribution Occupations

57302 - Mail Clerks, Except Mail Machine Operators and Postal Service - Prepare incoming and outgoing mail for distribution. Duties include time stamping, opening, reading, sorting, and routing incoming mail; sealing, stamping, and affixing postage to outgoing mail or packages; and keeping necessary records and completed forms. Exclude workers whose primary duty is mail distribution or operation of mail-preparing and mail-handling machines.

57305 - Postal Mail Carriers - Sort mail for delivery. Deliver mail on established route by vehicle or on foot.

57311 - Messengers - Run errands. Sort and deliver messages, documents, packages, and other items to offices or departments within an establishment or to other business concerns, traveling by foot, bicycle, motorcycle, automobile, or public conveyance. May use telephone to complete assigned tasks.

Material Recording, Scheduling, Dispatching, and Distributing Occupations

58002 - Dispatchers, Police, Fire, and Ambulance - Receive complaints from public concerning crimes and police emergencies. Broadcast orders to police radio patrol units in vicinity of complaint to investigate. Operate radio and telephone equipment to receive reports of fires and medical emergencies and relay information or orders to proper officials.

58005 - Dispatchers, Except Police, Fire, and Ambulance - Schedule and dispatch workers, work crews, equipment, or service vehicles for conveyance of materials, freight, or passengers or for normal installation, service, or emergency repairs rendered outside the place of business. Duties may include use of radio or telephone to transmit assignments and compiling statistics and reports on work progress.

58008 - Production, Planning, and Expediting Clerks - Coordinate and expedite the flow of work and materials within or between departments of an establishment according to production schedule. Duties, which are primarily clerical in

nature, include reviewing and distributing production schedules and work orders; conferring with department supervisors to determine progress of work and completion dates; and compiling reports on progress of work and production problems. Work may also include scheduling workers and estimating costs; routing and delivering parts to insure production quotas are met; scheduling shipment of parts; keeping inventory of material in departments; insuring vendors ship merchandise on promised date; and writing special orders for services and merchandise. Exclude workers whose primary duties are weighing, measuring, and checking merchandise, supplies, and equipment. Exclude workers who engage in material expediting of a nonclerical nature.

58011 - Transportation Agents - Expedite movement of freight, mail, baggage, and passengers through airline terminals. Route inbound and outbound air freight shipments. May prepare airway bill of lading on freight and record baggage, mail, freight, weights, and number of passengers on airplane.

58014 - Meter Readers, Utilities - Read electric, gas, water, or steam consumption meters and record volume used by residential and commercial customers.

58017 - Weighers, Measurers, Checkers, and Samplers, Recordkeeping - Weigh, measure, and check materials, supplies, and equipment for the purpose of keeping relevant records. Duties are primarily clerical by nature. Include workers who collect and keep record of samples of products or materials. Exclude Production Samplers and Weighers.

58023 - Stock Clerks - Stockroom, Warehouse or Storage Yard - Receive, store, and issue materials, equipment, and other items from stockroom, warehouse, or storage yard. Keep records and compile stock reports. Exclude stockroom laborers and workers whose primary duties involve shipping, weighing, and checking.

58026 - Order Fillers, Wholesale and Retail Sales - Fill customers' mail and telephone orders from stored merchandise in accordance with specifications on sales slips or order forms. Duties may include computing prices of items, completing order receipts, keeping records of outgoing orders, and requisitioning additional materials, supplies, and equipment. Exclude Laborers, Stock Clerks, and workers whose primary duties involve weighing and checking.

58028 - Shipping, Receiving, and Traffic Clerks - Verify and keep records on incoming and outgoing shipments. Prepare items for shipment. Duties include assembling, addressing, stamping, and shipping merchandise or material; receiving, unpacking, verifying, and recording incoming merchandise or material; and arranging for the transportation of products. Exclude Laborers, Stock Clerks, and workers whose primary duties involve weighing and checking.

58099 - All Other Material Recording, Scheduling, and Distributing Workers - All other material recording, scheduling, and distributing workers not classified separately above.

Other Clerical and Administrative Support Occupations

59999 - All Other Clerical and Administrative Support Workers - All other clerical and administrative support workers not classified separately above.

First-Line Supervisors and Managers/Supervisors - Service Occupations

61002 - Fire fighting and Prevention Supervisors - Supervise and coordinate activities of workers engaged in fire fighting and fire prevention and control.

61005 - Police and Detective Supervisors - Supervise and coordinate activities of members of police force.

61008 - Housekeeping Supervisors - Supervise work activities of cleaning personnel to insure clean, orderly, and attractive rooms in hotels, hospitals, educational institutions, and similar establishments. Assign duties, inspect work, and investigate complaints regarding housekeeping service and equipment and take corrective action. May purchase housekeeping supplies and equipment, take periodic inventories, screen applicants, train new employees, and recommend dismissals.

61099 - All Other Supervisors and Managers/Supervisors - Service Workers - All other supervisors and managers/supervisors of service workers not classified separately above.

Protective Service Occupations

63008 - Firefighters - Control and extinguish fires, protect life and property, and maintain equipment as paid volunteer or employee of city, township, state, or federal government.

63011 - Police Detectives - Conduct investigations to prevent or solve crimes.

63014 - Police Patrol Officers - Maintain order, enforce laws and ordinances, and protect life and property in an assigned patrol district. Perform combination of the following duties: Patrol a specific area on foot or in a vehicle; direct traffic; issue traffic summonses; investigate accidents; apprehend, arrest, and process prisoners; and give evidence in court.

63021 - Parking Enforcement Officers - Patrol assigned area such as public parking lot or section of city to issue tickets to overtime parking violators and illegally parked vehicles.

63023 - Bailiffs - Open court by announcing entrance of judge. Seat witnesses and jurors in specified areas of courtroom. Eject or arrest individuals disturbing proceedings.

63028 - Criminal Investigators, Public Service - Plan and conduct investigations related to suspected violations of federal, state, or local laws.

63032 - Sheriffs and Deputy Sheriffs - Enforce law and order in rural or unincorporated districts or serve legal processes of courts. May patrol courthouse, guard court or grand jury, or escort defendants. Exclude Deputy Sheriffs who spend the majority of their time guarding prisoners in county correctional institutions.

63035 - Detectives and Investigators, Except Public - Protect property, merchandise, and money of store or similar establishment by detecting theft, shoplifting, or other unlawful practices by public or employees. Perform necessary action to preserve order and enforce standards of decorum established by management. Include Investigators who conduct private investigations, such as

obtaining confidential information, seeking missing persons, or investigating crimes and thefts.

63044 - Crossing Guards - Guide or control vehicular or pedestrian traffic at such places as street and railroad crossings and construction sites.

63047 - Guards and Watch Guards - Stand guard at entrance or patrol premises to prevent theft, violence, or infractions of rules.

63099 - All Other Protective Service Workers - All other protective service workers not classified separately above.

Food and Beverage Preparation and Service Occupations

65002 - Hosts and Hostesses, Restaurant, Lounge, or Coffee Shop - Welcome patrons, seat them at tables or in lounge, and insure quality of facilities and service.

65005 - Bartenders - Mix and serve to patrons, directly or through wait staff, alcoholic and nonalcoholic drinks following standard recipes.

65008 - Waiters and Waitresses - Serve food and/or beverages to patrons at tables. Usually take order from patron and make out check. May set table with linen and silverware and take payment from patron. May serve customers at counter as well as table. Exclude workers who only work at counters.

65011 - Food Servers, Outside - Serve food to patrons outside of a restaurant environment, such as in hotels, hospital rooms, or cars. Exclude Food Vendors.

65014 - Dining Room and Cafeteria Attendants and Bartender Helpers - Perform any combination of the following duties to facilitate food service: Carry dirty dishes from dining room to kitchen; replace soiled table linens; set tables with silverware and glassware; replenish supply of clean linens, silverware, glassware, and dishes; supply service bar with food, such as soups, salads, and desserts; and serve ice water, butter, and coffee to patrons. May wash tables.

65017 - Counter Attendants - Lunchroom, Coffee Shop, or Cafeteria - Serve food to diners at counter or from a steam table. Exclude Counter Attendants who also wait tables.

65021 - Bakers, Bread and Pastry - Mix and bake ingredients according to recipes to produce small quantities of breads, pastries, and other baked goods for consumption on premises or for sale as specialty baked goods.

65023 - Butchers and Meat Cutters - Cut, trim, and prepare carcasses and consumer-sized portions of meat for sale or for use in food service establishments. Exclude butchers working in slaughtering, meatpacking, or prepared-meat establishments.

65026 - Cooks, Restaurant - Prepare, season, and cook soups, meats, vegetables, desserts, and other foodstuffs in restaurants. May order supplies, keep records and accounts, price items on menu, or plan menu.

65028 - Cooks, Institution or Cafeteria - Prepare and cook family style meals for institutions such as schools, hospitals, or cafeterias. Usually prepare meals in large quantities rather than to individual order. May cook for employees in office building or other large facility.

65032 - Cooks, Fast Food - Prepare and cook food in a fast-food restaurant with a limited menu. Duties of the cooks are limited to preparation of a few basic items and normally involve operating large-volume, single-purpose cooking equipment.

65035 - Cooks, Short Order - Prepare and cook to order a variety of foods that require only a short preparation time. May take orders from customers and serve patrons at counters or tables. Exclude Cooks, Fast Food.

65038 - Food Preparation Workers - Perform a variety of food preparation duties, such as preparing cold foods and maintaining and cleaning kitchen work areas, equipment, and utensils. Perform simple tasks such as preparing shellfish or slicing meat. May brew coffee and tea or prepare sandwiches.

65041 - Combined Food Preparation and Service Workers - Perform duties which combine both food preparation and food service. Workers who spend more than 80 percent of their time in one job should be reported in that occupation.

65099 - All Other Food Service Workers - All other food service workers not classified separately above.

Health Service and Related Occupations

66002 - Dental Assistants - Assist dentist at chair, set up patient and equipment, keep records, and perform related duties as required.

66005 - Medical Assistants - Perform various duties under the direction of physician in examination and treatment of patients. Prepare treatment room, inventory supplies and instruments, and set up patient for attention of physician. Hand instruments and materials to physician as directed. Schedule appointments, keep medical records, and perform secretarial duties.

66008 - Nursing Aides, Orderlies, and Attendants - Work under the direction of nursing or medical staff to provide auxiliary services in the care of patients. Perform duties such as answering patient's call bell, serving and collecting food trays, and feeding patients. Orderlies are primarily concerned with setting up equipment and relieving nurses of heavier work. Exclude Psychiatric Aides and Home Health Aides.

66011 - Home Health Aides - Care for elderly, convalescent, or handicapped person in home of patient. Perform duties for patient such as changing bed linen; preparing meals; assisting in and out of bed; bathing, dressing, and grooming; and administering oral medications under doctors' orders or direction of nurse. Exclude Nursing Aides and Homemakers.

66017 - Physical and Corrective Therapy Assistants and Aides - Prepare patient and/or administer physical therapy treatment, such as massages, traction, and heat, light and sound treatment. Instruct, motivate, and assist patients with learning and improving functional activities. Normally work under the direction of a Physical or Corrective Therapist.

66021 - Occupational Therapy Assistants and Aides - Assist Occupational Therapists in administering medically-oriented occupational programs to assist in rehabilitating patients in hospitals and similar institutions.

66099 - All Other Health Service Workers - All other health service workers not classified separately above.

Cleaning and Building Service Occupations

67002 - Maids and Housekeeping Cleaners - Perform any combination of tasks to maintain private households or commercial establishments, such as hotels, restaurants and hospitals, in a clean and orderly manner. Duties include making beds, replenishing linens, cleaning rooms and halls, and arranging furniture.

67005 - Janitors and Cleaners, Except Maids and Housekeeping Cleaners - Keep buildings in clean and orderly condition. Perform heavy cleaning duties, such as operating motor-driven cleaning equipment, mopping floors, washing walls and glass, and removing rubbish. Duties may include tending furnace and boiler, performing routine maintenance activities, notifying management of need for repairs and additions, and cleaning snow or debris from sidewalk.

67008 - Pest Controllers and Assistants - Spray or release chemical solutions or toxic gases and set mechanical traps to kill pests and vermin such as mice, termites, and roaches, that infest buildings and surrounding areas.

67099 - All Other Cleaning and Building Service Workers - All other cleaning and building service workers not classified separately above.

Personal Service Occupations

68005 - Hairdressers, Hairstylists, and Cosmetologists - Provide beauty services, such as suggesting hairstyles, cutting and treating hair and scalp, applying makeup, dressing wigs, and electrolysis, to customers. Exclude Shampooers, Manicurists, and Beauty School Instructors.

68014 - Amusement and Recreation Attendants - Perform any of a variety of attending duties at amusement or recreation facility. Schedule use of recreation facilities, allocate equipment to participants of sporting events or recreational pursuits, collect fees for games played, or operate carnival rides and amusement concessions.

68017 - Guides - Escort individuals or groups on cruises, sightseeing tours, or through places of interest such as industrial establishments, public buildings, and art galleries.

68021 - Ushers, Lobby Attendants, and Ticket Takers - Assist patrons at entertainment events, such as sporting events, motion pictures, or theater performances. Collect admission tickets and passes from patrons. May assist in finding seats, searching for lost articles, and locating such facilities as rest rooms and telephones.

68023 - Baggage Porters and Bellhops - Carry baggage for travelers at transportation terminals or for guests at hotels or similar establishments. Additional duties include assisting handicapped persons, running errands, delivering ice, and directing people to their desired destinations.

68035 - Personal and Home Care Aides - Perform a variety of tasks at places of residence. Duties include keeping house and advising families having problems with such things as nutrition, cleanliness, and household utilities. Exclude Nursing Aides and Home Health Aides.

68038 - Child Care Workers - Attend to children at child care centers, schools, businesses, and institutions. Perform variety of tasks such as dressing, feeding, bathing, and overseeing play. Exclude Preschool Teachers and Teacher Aides.

68041 - Funeral Attendants - Perform variety of tasks during funeral such as placing casket in parlor or chapel prior to service; arranging floral offerings or lights around casket; directing or escorting mourners; closing casket; and issuing and storing funeral equipment.

69999 - All Other Service Workers - All other service workers not classified separately above.

First-Line Supervisors

72002 - First-Line Supervisors and Managers/Supervisors - Agricultural, Forestry, Fishing, and Related Workers - Directly supervise and coordinate the activities of agricultural, forestry, fishing, and related workers. May supervise helpers assigned to these workers. Managers/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work, and may also engage in the same work as the workers they supervise. Exclude work leaders who spend 20 percent or more of their time at tasks similar to those of the employees under their supervision and report them in the occupations which are most closely related to their specific work duties.

Timber Cutting and Logging Occupations

73002 - Fallers and Buckers - Fell trees and saw into specified log lengths, working alone or as a member of a team.

73005 - Choke Setters - Fasten chokers around logs, preparing to yard them from felling and bucking area to storage or loading landing.

73008 - Log-Handling Equipment Operators - Operate log handling equipment to unload log trucks and gondolas or deck logs by species, size, and sort.

73011 - Logging Tractor Operators - Drive tractor equipped with one or more accessories, such as bulldozer blade, frontal hydraulic shear, grapple, logging arch, cable winches, hoisting rack, or crane boom, to fell tree, to skid, load and unload, or stack logs, or to pull stumps or clear brush.

73099 - All Other Timber Cutting and Related Logging Workers - All other timber cutting and related logging workers not classified separately above.

Other Agricultural, Forestry, Fishing, and Related Occupations

79002 - Forest and Conservation Workers - Develop, maintain, and protect forest, forested areas, and woodlands through such activities as raising and transporting tree seedlings; combating insects, pests, and diseases harmful to trees; and controlling erosion and leaching of forest soil. Include Forester Aides, Seedling Pullers, and Tree Planters.

79008 - Log Graders and Scalers - Grade logs or estimate the marketable content or value of logs or pulpwood in sorting yards, millpond, log deck, or similar locations. Inspect logs for defects or measure logs to determine volume. Exclude Log Inspectors who are primarily buyers.

79017 - Animal Caretakers, Except Farm - Feed, water, groom, exercise, or otherwise care for small or large animals, fish, or birds in zoos, circuses, pounds, laboratories, animal hospitals, aquariums, kennels, or stables. Clean and repair cages, pens, or fish tanks. May administer tests to animals or give treatments to sick or injured animals. May keep records of feedings, tests, and treatments; and of animals received and discharged.

79036 - Sprayers/Applicators - Spray herbicides, pesticides, and fungicides on trees, shrubs, and lawns using hoses and truck-mounted tank. Fill sprayer tank with water and chemicals according to prescribed formula. May use portable spray equipment. Exclude workers who also perform duties of Lawn Maintenance Workers or Pruners.

79041 - Laborers, Landscaping and Groundskeeping - Landscape and/or maintain grounds of property using hand or power tools or equipment. May work in nursery facility or at customer location. Workers typically perform a variety of tasks, which may include any combination of the following: sod laying, mowing, trimming, planting, watering, fertilizing, digging, raking, and sprinkler installation. Workers may help Brick and Stonemasons.

79806 - Veterinary Assistants - Examine animals for veterinarian, prepare animals for surgery, perform post-operational medical treatment as needed, and give medications to animals. Usually works directly under veterinarian. Receive extensive training on the job and may also have some postsecondary education such as trade school or junior college.

79999 - All Other Agricultural, Forestry, Fishing, and Related Workers - All other agricultural, forestry, fishing, and related workers not classified separately above.

First-Line Supervisors and Managers/Supervisors - Production, Construction, Maintenance, and Related Occupations

81002 - First-Line Supervisors and Managers/Supervisors - Mechanics, Installers, and Repairers - Directly supervise and coordinate activities of mechanics, repairers, and installers and their helpers. Managers/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work, and may also engage in the same repair work as the workers they supervise. Exclude work leaders who spend 20 percent or more of their time at tasks similar to those of employees under their supervision and report them in the occupations which are most closely related to their specific work duties.

81005 - First-Line Supervisors and Managers/Supervisors - Construction Trades and Extractive Workers - Directly supervise and coordinate activities of construction or extractive workers. Managers/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work, and may also engage in the same construction work as the workers they supervise. Exclude work leaders who spend 20 percent or more of their time at tasks similar to those of employees under their supervision and report them in the occupations which are most closely related to their specific work duties.

81008 - First-Line Supervisors and Managers/Supervisors - Production and Operating Workers - Directly supervise and coordinate activities of production and operating workers, such as testers, precision workers, machine setters and operators, assemblers, fabricators, or plant and system operators. Managers/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work, and may also engage in the same production work as the workers they supervise. Exclude work leaders who spend 20 percent or more of their time at tasks similar to those of employees under their supervision and report them in the occupations which are most closely related to their specific work duties.

81011 - First-Line Supervisors and Managers/Supervisors - Transportation and Material-Moving Machine and Vehicle Operators - Directly supervise and coordinate activities of transportation and material-moving machine and vehicle operators. May supervise helpers assigned to these workers. Managers/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work, and may also engage in the same work as the workers they supervise. Exclude work leaders who spend 20 percent or more of their time at tasks similar to those of employees under their supervision and report them in the occupations which are most closely related to their specific work duties.

81017 - First-Line Supervisors and Managers/Supervisors - Helpers, Laborers, and Material Movers, Hand - Directly supervise and coordinate activities of helpers, laborers, and material movers. Managers/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work, and may also engage in the same hand labor as the workers they supervise. Exclude work leaders who spend 20 percent or more of their time at tasks similar to those of employees under their supervision and report them in the occupations which are most closely related to their specific work duties.

81099 - All Other First-Line Supervisors and Managers/Supervisors - Production, Construction, Maintenance, and Related Workers - All other first-line supervisors in this category not classified separately above.

Inspectors and Related Occupations

83002 - Precision Inspectors, Testers, and Graders - Perform precision inspecting, testing, and grading of parts, products, and equipment for defects, wear, and deviations from specifications. The majority of these workers use precision measuring instruments and complex test equipment and hand tools. May make minor repairs. Exclude workers who combine inspection and testing with major repair work.

83005 - Production Inspectors, Testers, Graders, Sorters, Samplers, and Weighers - Inspect, test, grade, sort, sample, or weigh nonagricultural raw materials or processed, machined, fabricated, or assembled parts or products. Work may be performed before, during, or after processing.

Mechanics, Installers, and Repairers

Machinery and Related Mechanics, Installers, and Repairers

85110 - Machinery Maintenance Mechanics - Repair and maintain the operating condition of industrial production and processing machinery, printing machinery, and refinery and pipeline distribution systems. Duties include repairing machinery and mechanical equipment, such as pumps, conveyor systems, and motors, in accordance with diagrams, operating manuals, or manufacturer's specifications. Exclude Millwrights and Mobile Heavy Equipment Mechanics, such as crane, bulldozer, grader, or conveyor mechanics.

85118 - Machinery Maintenance Mechanics, Water or Power Generation Plant - Install, adjust, repair, and maintain machinery in power generating stations and water treatment plants. Duties include the repair and maintenance of: Mechanical elements of generators, waterwheels, piping, and water-inlet controls in generating stations; steam boilers, condensers, pumps, compressors, and similar equipment in gas manufacturing plants; and equipment used to process and distribute water for human consumption and industrial use.

85119 - All Other Machinery Maintenance Mechanics - All other machinery maintenance mechanics not classified separately above.

85123 - Millwrights - Install new machinery and heavy equipment according to layout plans, blueprints, and other drawings. Dismantle and move machinery and heavy equipment when changes in plant layout are required. Use a variety of hand tools, hoists, dollies, and trucks. May construct foundations for machines.

85128 - Machinery Maintenance Workers - Change parts, lubricate machinery, and perform other routine machinery maintenance. Exclude workers who repair machinery.

85132 - Maintenance Repairers, General Utility - Perform work involving two or more maintenance skills to keep machines, mechanical equipment, or structure of an establishment in repair. Duties may involve pipefitting, boilermaking, insulating, welding, machining, machine and equipment repairing, carpentry, and electrical work. May also include planning and laying out of work relating to repairs; repairing electrical and/or mechanical equipment; installing, aligning, and balancing new equipment; and repairing buildings, floors, or stairs. This occupation is generally found in small establishments where specialization in maintenance work is impractical.

Mobile Equipment Mechanics, Installers, and Repairers

85302 - Automotive Mechanics - Adjust, repair, and overhaul automotive vehicles. May be designated according to specialties, such as Brake Repairers, Transmission Mechanics, or Front-end Mechanics. Exclude Auto Body Repairers, Bus and Truck Mechanics, Diesel Engine Specialists, and Electrical Systems Specialists.

85305 - Automotive Body and Related Repairers - Repair, repaint, and refinish automotive vehicle bodies; straighten vehicle frames; and replace damaged vehicle glass.

85308 - Motorcycle Repairers - Repair and overhaul motorcycles, motor scooters, mopeds, or similar motorized vehicles.

85311 - Bus and Truck Mechanics and Diesel Engine Specialists - Repair and maintain the operating condition of trucks, buses, and all types of diesel engines. Include mechanics working primarily with automobile diesel engines.

85314 - Mobile Heavy Equipment Mechanics, Except Engines - Repair and maintain mobile mechanical, hydraulic, and pneumatic equipment, such as cranes, bulldozers, graders, and conveyors, used in construction, logging, and surface mining. Exclude Rail Car Repairers and Diesel Engine Specialists.

85321 - Farm Equipment Mechanics - Maintain, repair, and overhaul farm machinery and vehicles, such as tractors, harvesters, and irrigation systems. Include repairers of dairy equipment. Exclude Engine Specialists.

85323 - Aircraft Mechanics - Repair and maintain the operating condition of aircraft assemblies, such as hydraulic and pneumatic systems, landing gear, propeller assemblies, fuel tanks, and airframe assemblies. Inspect, test, modify, and install equipment according to specifications, using tools such as power shears, acetylene welding equipment, rivet guns, and air or electric drills. Include Helicopter Repairers. Exclude Aircraft Engine Specialists and Aircraft Electricians.

85328 - Small Engine Specialists - Repair and maintain the operating condition of nonautomobile gasoline-powered, internal combustion engines and the equipment powered by those engines. Include repairers of outboard motors, snowmobiles, lawn mowers, and chain saws. Exclude Motorcycle Repairers.

Communications Equipment Mechanics, Installers, and Repairers

85502 - Central Office and PBX Installers and Repairers - Test, analyze, and repair telephone or telegraph circuits and equipment at a central office location using test meters and hand tools. Analyze and repair defects in communications equipment on customers' premises using circuit diagrams, polarity probes, meters, and a telephone test set. May install equipment.

85514 - Radio Mechanics - Test and repair stationary, mobile, and portable radio transmitting and receiving equipment and two-way radio communications systems, used in ship-to-shore communications and found in service and emergency vehicles, in accordance with diagrams and manufacturers' specifications. Examine equipment for damaged components and loose or broken connections and wires; replace defective components and parts. Involves use of hand tools and electrical measuring instruments. May repair intercommunication telephone systems. Occupation may require federal Communications Commission Radiotelephone Operator's License, depending on the nature of repairs performed.

85599 - All Other Communications Equipment Mechanics, Installers, and Repairers - All other communications equipment mechanics, installers, and repairers not classified separately above.

Other Electrical and Electronic Equipment Mechanics, Installers, and Repairers

85702 - Telephone and Cable Television Line Installers and Repairers - String and repair telephone and television cable and other equipment for transmitting messages or TV programming. Duties include locating and repairing defects in existing systems; placing, rearranging, and removing underground or aerial cables; installing supports, insulation, or guy wire systems; and other auxiliary tasks necessary to maintain lines and cables.

85705 - Data Processing Equipment Repairers - Repair, maintain, and install electronic computers (mainframes, minis, and micros), peripheral equipment, and word processing systems.

85708 - Electronic Home Entertainment Equipment Repairers - Adjust and repair radios, televisions, stereo systems, recorders, video systems, or other electronic home entertainment equipment.

85711 - Electric Home Appliance and Power Tool Repairers - Repair, adjust, and install all types of electric household appliances, such as refrigerators, washing machines, dishwashers, vacuum cleaners, room air conditioners, and small appliances, including toasters, mixers, and food processors. Include repairers of electrical hand and bench tools, such as lathes, drills, saws, grinders, and polishers.

85717 - Electronics Repairers, Commercial and Industrial Equipment - Repair electronic equipment such as industrial controls, telemetering and missile control systems, radar systems, transmitters, and antennae, using hand tools and testing instruments. Exclude repairers of data processing equipment and home entertainment equipment.

85723 - Electrical Power-Line Installers and Repairers - Install and repair cables or wires used in electrical power or distribution systems. Install insulators, erect wooden poles and light or heavy duty transmission towers. Include Cable Splicers and Trouble Shooters. Exclude repairers of transformers and substation equipment, and telephone and telegraph communications workers.

85726 - Station Installers and Repairers, Telephone - Install and repair telephone station equipment, such as telephones, coin collectors, telephone booths, and switching-key equipment.

85728 - Electrical Installers and Repairers, Transportation Equipment - Install, adjust, and maintain electrical systems and wiring switches and fixtures on motor vehicles, trains, or aircraft.

85799 - All Other Electrical and Electronic Equipment Mechanics, Installers, and Repairers - All other electrical and electronic equipment mechanics, installers, and repairers not classified separately above.

Other Mechanics, Installers, and Repairers

85902 - Heating, Air Conditioning, and Refrigeration Mechanics and Installers - Install and repair heating, air conditioning, and refrigerating systems. Duties include installation and repair of oil burners, hot-air furnaces, heating stoves, and similar equipment in homes and commercial establishments, using hand and pipe

threading tools. Includes the installation and repair of cooling and central air conditioning systems.

85905 - Precision Instrument Repairers - Install, test, repair, maintain, and adjust indicating, recording, telemetering, and controlling instruments used to measure and control variables such as pressure, flow, temperature, motion, force, and chemical composition. Include instrument repairers who repair, calibrate, and test instruments such as voltmeters, ammeters, and galvanometers.

85908 - Electromedical and Biomedical Equipment Repairers - Test, adjust, and repair electromedical equipment using hand tools and meters.

85911 - Electric Meter Installers and Repairers - Install electric meters on customers' premises or on pole. Test meters and perform necessary repairs. Turn current on/off by connecting/disconnecting service drop.

85926 - Office Machine and Cash Register Servicers - Repair and service office machines, such as adding, accounting, calculating, duplicating, and typewriting machines. Include the repair of manual, electrical, and electronic office machines. Exclude the repair of computerized systems and word processing systems.

85928 - Mechanical Control and Valve Installers and Repairers - Install, repair, and maintain mechanical regulating and controlling devices, such as gas regulators, thermostats, safety and flow valves, and other mechanical governors.

85938 - Installers and Repairers, Manufactured Buildings, Mobile Homes, and Travel Trailers - Install, repair, and maintain units and systems in mobile homes, prefabricated buildings, or travel trailers, using hand tools or power tools.

85944 - Gas Appliance Repairers - Repair and install gas appliances and equipment, such as ovens, dryers, and hot water heaters.

85947 - Coin and Vending Machine Servicers and Repairers - Install, service, adjust, and repair coin or vending machines placed in establishments on a concessional basis, using hand or power tools. Exclude repairers of electronic video games and other specialized electronic vending machines.

85951 - Bicycle Repairers - Repair and service bicycles using hand tools.

85953 - Tire Repairers and Changers - Repair and replace tires, tubes, treads, and related products on automobiles, buses, trucks, and other vehicles. Duties include mounting tires on wheels, balancing tires and wheels, and testing and repairing damaged tires and inner tubes.

85956 - Menders, Garments, Linens, and Related - Repair defects such as tears and holes in garments, linens, curtains, and draperies. Rebind cleaned blankets by hand or by operating a sewing machine.

85999 - All Other Mechanics, Installers, and Repairers - Include all mechanics, installers, and repairers not classified separately above.

Construction Trades and Extractive Occupations, Except Material-Moving Carpentry and Related Occupations

87102 - Carpenters - Construct, erect, install and repair structures, fixtures, and equipment of wood, plywood, and wallboard, using carpentry tools and wood-working machines.

87108 - Drywall Installers - Apply plasterboard or other wallboard to ceilings and interior walls of buildings.

Electrical and Related Occupations

87202 - Electricians - Install, maintain, and repair electrical wiring, equipment, and fixtures. Insure that work is in accordance with relevant codes. May read blueprints. Include Protective Signal Installers and Repairers and Streetlight Servicers.

Masonry and Related Occupations

87302 - Brickmasons - Lay building materials, such as brick, structural tile, concrete, cinder, glass, gypsum, and terra cotta block (except stone), to construct or repair walls, partitions, arches, sewers, and other structures. Include Refractory Brickmasons.

87311 - Concrete and Terrazzo Finishers - Apply cement, sand, pigment, or marble chips to floors, stairways, and cabinet fixtures to finish and attain durable and decorative surfaces, according to specifications and drawings. Finish surfaces to remove imperfections from freshly poured concrete walls, roads, walkways, and ornamental stone facings of concrete structural products. Include Concrete Rubbers.

Painting and Related Occupations

87402 - Painters and Paperhangers, Construction and Maintenance - Painters: Paint walls, equipment, buildings, bridges, and other structural surfaces, using brushes, rollers, and spray guns. May mix colors or oils to obtain desired color or consistency. Paperhangers: Cover interior walls and ceilings of rooms with decorative wallpaper or fabric, or attach advertising posters on surfaces such as walls and billboards. Duties include removing old materials from surface to be papered.

Plumbing and Related Occupations

87502 - Plumbers, Pipefitters, and Steamfitters - Assemble, install, alter, and repair pipe systems (metal, plastic, ceramic, composition, etc.) that carry water, steam, air, or other liquids or gases.

87508 - Pipelayers - Lay glazed or unglazed clay, concrete, plastic, or cast-iron pipe for storm or sanitation sewers, drains, water mains, and oil or gas lines. Perform any combination of the following tasks: Grade trenches or culverts, position pipe, or seal joints.

87511 - Septic Tank Servicers and Sewer Pipe Cleaners - Clean and repair septic tanks, sewer lines, or drains. May patch walls and partitions of tank, replace damaged drain tile, or repair breaks in underground piping.

Floor Related Workers, Except Carpenters

87602 - Carpet Installers - Lay carpets or rugs in homes or buildings. Exclude workers who lay linoleum.

Road, Rail, and Related Construction and Maintenance Workers, Except Masonry Workers

87708 - Paving, Surfacing, and Tamping Equipment Operators - Operate equipment used for applying concrete, asphalt, or other materials to road beds, parking lots, or airport runways and taxiways, or equipment used for tamping gravel, dirt, or other materials. Include Concrete and Asphalt Paving Machine Operators, Form Tampers, Tamping Machine Operators, and Stone Spreader Operators.

87711 - Highway Maintenance Workers - Maintain highways, municipal and rural roads, airport runways, and rights-of-way in safe condition. Duties include patching broken or eroded pavement, and erecting and repairing guardrails, highway markers, and snow fences using a posthole digger, shovel, axe, saw, hammer and nails, or power tools. May also clear brush or plant trees along rights-of-way.

87714 - Rail-Track Laying and Maintenance Equipment Operators - Lay, repair, and maintain track for standard or narrow-gauge railroad equipment used in regular railroad service or in plant yards, quarries, sand and gravel pits, and mines. Include Ballast Cleaning Machine Operators and Road Bed Tamping Machine Operators.

Other Construction Trades Occupations

87802 - Insulation Workers - Cover and line structures with insulation using saws, knives, rasps, trowels, and other tools and implements. May also specialize in providing blown-in insulation.

87803 - Hazardous Materials Removal Workers - Remove, pack, transport, and/or dispose of hazardous materials, including asbestos, waste fuel, contaminated soil, etc. Specialized training and certification in hazardous materials handling and/or a confined entry permit are generally required.

87805 - Sheet Metal Duct Installers - Install prefabricated sheet metal ducts used for heating, air conditioning, or other purposes in buildings and similar structures.

87808 - Roofers - Cover roofs of structures with slate, asphalt, aluminum, wood, and related materials using brushes, knives, punches, hammers, and other tools. May spray roofs, sidings, and walls with material to bind, seal, insulate, or soundproof sections of structures.

87811 - Glaziers - Install glass in windows, skylights, storefronts, and display cases, or on surfaces such as building fronts, interior walls, ceilings, and tabletops. Exclude Glaziers who work primarily on production lines.

87814 - Structural Metal Workers - Raise, place, and unite girders, columns, and other structural steel members to form completed structures or structural frameworks. Include workers who erect metal storage tanks and assemble prefabricated metal buildings. Exclude reinforcing metal workers.

87817 - Fence Erectors - Erect and repair metal and wooden fences and fence gates around highways, industrial establishments, residences, or farms, using hand and power tools.

87899 - All Other Construction Trades Workers - All other construction trades workers not classified separately above.

Extractive and Related Occupations, Including Blasters

87902 - Earth Drillers, Except Oil and Gas - Operate a variety of drills to tap subsurface water and salt deposits, to remove core samples during mineral exploration or soil testing, and to facilitate the use of explosives in mining or construction. Include Core, Well, and Foundation Drill Operators and Horizontal and Earth Boring Machine Operators. Exclude Oil Well Drillers.

87905 - Blasters and Explosives Workers - Place explosives in holes or other spots and detonate the explosives to demolish structures or to loosen, remove, or displace earth, rock, or other materials. Include Tier-Detonator Blasters, Perforator Operators, and Seismograph Shooters.

87911 - Rotary Drill Operators, Oil and Gas Extraction - Set up or operate a variety of drills to remove petroleum products from the earth and to remove core samples for testing during oil and gas exploration. Include Core and Rotary Drillers and Well and Prospecting Drillers.

87914 - Derrick Operators, Oil and Gas Extraction - Rig derrick equipment and operate pumps to circulate mud through drill hole.

87917 - Service Unit Operators - Operate equipment to increase oil flow from producing wells or to remove stuck pipe, casing, tools, or other obstructions from drilling wells. Include Fishing-Tool Technicians.

87921 - Roustabouts - Perform a variety of assigned tasks in or around an oil field such as assembling or repairing equipment, digging drainage trenches, and loading/unloading trucks.

87999 - All Other Construction and Extractive Workers, Except Helpers - All other construction and extractive workers, except helpers, not classified separately above.

Precision Production Occupations

Precision Metal Occupations

89108 - Machinists - Set up and operate variety of machine tools. Fit and assemble parts to make or repair machine tools and maintain industrial machines, applying knowledge of mechanics, shop mathematics, metal properties, layout, and machining procedures. Study specifications, such as blueprints, sketch, or description of part to be replaced, and plan sequence of operations.

89111 - Tool Grinders, Filers, Sharpeners, and Other Precision Grinders - Perform such operations as precision smoothing, sharpening, polishing, and grinding of metal objects by the wearing action of abrasive materials or machine files. Include Tool, Cylinder, and Card Grinders and Grinder Operators, Saw Filers, and Filer-Finishers.

89123 - Jewelers and Silversmiths - Jewelers: Fabricate, adjust, or repair jewelry. Silversmiths: Design, assemble, decorate, or repair silver articles. May specialize in one or more areas of the jewelry field, such as repairing, selling, or appraising. Exclude workers who perform a specialized operation such as fancy wire drawing.

89132 - Sheet Metal Workers - Fabricate, assemble, install, and repair sheet metal products and equipment, such as control boxes, drainpipes, and furnace casings. Work may involve any of the following: Set up and operate fabricating machines to cut, bend, and straighten sheet metal; shape metal over anvils, blocks, or forms using hammer; operate soldering and welding equipment to join sheet metal parts; inspect, assemble, and smooth seams and joints of burred surfaces.

89135 - Boilermakers - Construct, assemble, maintain, and repair stationary steam boilers and boiler house auxiliaries. Align structures or plate sections to assemble boiler frame tanks or vats, following blueprints. Work involves use of hand and power tools, plumb bobs, levels, wedges, dogs, or turnbuckles. Assist in testing assembled vessels. Direct cleaning of boilers and boiler furnaces. Inspect and repair boiler fittings, such as safety valves, regulators, automatic-control mechanisms, water columns, and auxiliary machines.

89199 - All Other Precision Metal Workers - All other precision metal workers not classified separately above.

Precision Wood Occupations

89308 - Wood Machinists - Set up and operate a variety of woodworking machines to surface, cut, and shape lumber, and to fabricate parts for wood products, such as door and window frames, furniture, and sashes, according to specifications. Exclude workers primarily concerned with one or a limited number of machine phases and report them according to their specialty.

89311 - Cabinetmakers and Bench Carpenters - Cut, shape, and assemble wooden articles, such as store fixtures, office equipment, cabinets, and high grade furniture. Set up and operate variety of machines, such as power saws, jointers, mortisers, tenoners, molders, and shapers, to cut and shape parts from wood stock. Exclude workers primarily concerned with one or a limited number of machine phases and report them according to their specialty.

89314 - Furniture Finishers - Shape, finish, and refinish damaged, worn, or used furniture or new high-grade furniture to specified color or finish, utilizing knowledge of wood properties, finishes, and furniture style.

Precision Textile, Apparel, and Furnishings Occupations

89502 - Fabric and Apparel Patternmakers and Layout Workers - Draw and construct sets of precision master patterns or layouts. Mark and cut fabrics and apparel according to blueprints or specifications.

89505 - Custom Tailors and Sewers - Design and make tailored garments, applying knowledge of garment design, construction, styling, and fabric. Alter, repair, or fit made-to-measure or ready-to-wear garments, sewing by hand or machine.

89508 - Upholsterers - Make, repair, and replace upholstery for household furniture or transportation vehicles, using knowledge of fabrics and methods of upholstery. Include workers in both manufacturing and nonmanufacturing industries. Exclude workers who perform a specialized operation such as Sewing Machine Operators, Assemblers, and Hand Cutters and Trimmers.

Precision Printing Occupations

89706 - Paste-Up Workers - Arrange and mount typeset material and illustrations into pasteup for printing reproduction, based on artist's or editor's layout.

89707 - Electronic Pagination System Operators - Using a computer screen, call up type and art elements from computer memory and position them into a completed page, using knowledge of typesets and size and composition patterns. The composed page is then transmitted for production into film or directly into plates.

Precision Food Occupations

89802 - Slaughterers and Butchers - Work in a slaughtering or meatpacking establishment to prepare meat for sale by performing precision tasks such as stunning, skinning and trimming; cutting standard cuts of meat for marketing; cleaning and salting hides; making sausage; preparing meats for salting; and wrapping meats.

Other Precision Occupations

89905 - Precision Molders, Shapers, Casters, and Carvers, Except Jewelry and Foundry - Mold, shape, cast, or carve products consisting of clay, glass, plaster, concrete, and stone, or combinations of materials into semifinished or finished products.

89911 - Precision Detail Design Decorators and Painters - Design or decorate articles such as jewelry, furniture, glassware, pottery, or toys with paints, lacquers, enamels, shellac, or gilt. Types of processes include painting, carving, printing, drawing, artistic lettering, decorative screen making, advertising layout, and detail design of forms. Include Screen or Stencil Printers and Setters, Layout Formers, Gilders, Luster Applicators, and Tile Decorators. Exclude professional Artists and Designers and workers concerned with developing, coloring, and retouching photographs.

89914 - Precision Photographic Process Workers - Perform precision work involved in photographic processing, such as retouching photographic negatives and prints to stress specific features or identifying characteristics of subjects. Restore damaged and faded photographs. Color or shade drawings to create photographic likenesses using an airbrush. May also color photographs using oil colors, to produce natural, lifelike appearances according to specifications.

89921 - Precision Dental Laboratory Technicians - Construct and repair full or partial dentures or dental appliances or apparatus, following prescriptions or specifications of Dentists or Orthodontists. May also provide analytical and diagnostic services. Include Dental Ceramists, Crown and Bridge Technicians, and Orthodontic Technicians. Exclude Assistants, Bite-Block Makers, Opaquers, and Denture and Coiler Packers.

89999 - All Other Precision Workers - All other precision workers not classified separately above.

Machine Setters, Set-Up Operators, Operators, and Tenders

Machine Tool Cutting Setters, Operators, and Related Occupations - Metal and Plastic

91117 - Machine Tool Cutting Operators and Tenders, Metal and Plastic - Operate or tend one type of cutting machine tool which has previously been set up. Exclude workers who operate or tend more than one type of cutting machine. Types of cutting machine tools include: Sawing Machines, Grinding Machines, Lathe and Turning Machines, Buffing and Polishing Machines, Drilling and Boring Machines, Lapping and Honing Machines, Milling and Planing Machines.

Machine Forming Setters, Operators, and Related Occupations - Metal and Plastic

91321 - Machine Forming Operators and Tenders, Metal and Plastic - Operate or tend one type of forming machine which has previously been set up. Exclude workers who operate more than one type of forming machine. Types of forming machines include: Punching Machines, Rolling Machines, Shear and Slitter Machines, Press and Press Brake Machines, Extruding and Drawing Machines, Forging Machines.

Metal Fabricating and Related Machine Setters, Operators, and Related Occupations

91705 - Welding Machine Operators and Tenders - Operate or tend welding machines or robots that join or bond together components to fabricate metal products and assemblies, according to specifications and blueprints.

91714 - Metal Fabricators, Structural Metal Products - Fabricate and assemble structural metal products, such as frameworks or shells for machinery, ovens, tanks, and stacks, and metal parts for buildings and bridges, according to job order or blueprints.

Metal and Plastic Processing Machine Setters, Operators, and Related Occupations

91905 - Plastic Molding and Casting Machine Operators and Tenders - Operate or tend plastic molding machines, such as compression or injection molding machines, to mold, form, or cast thermoplastic materials to specified shape.

Other Metal and Plastic Machine Setters, Operators, and Related Occupations

92198 - All Other Metal and Plastic (Cutting, Forming, Fabricating, or Processing) Machine Operators and Tenders - All other metal and plastic machine operators and tenders not classified separately above.

Woodworking Machine Setters, Operators, and Related Occupations

92302 - Sawing Machine Setters and Set-up Operators - Set up or set up and operate wood-sawing machines. Examine blueprints, drawings, work orders, and patterns to determine size and shape of items to be sawed, sawing machines to set up, and sequence of sawing operations.

92305 - Head Sawyers - Operate head saws and feed carriages to saw logs into rough cants or boards from heading bolts.

92308 - Sawing Machine Operators and Tenders - Operate or tend wood-sawing machines, such as circular saws, band saws, multiple blade sawing machines, scroll saws, rip saws, equalizer saws, power saws, and crozer machines. Duties include: sawing logs to specifications; cutting lumber to specified dimensions; sawing curved or irregular designs; trimming edges and removing defects from lumber; or cutting grooves, bevel, and miter according to specifications or work orders.

92311 - Woodworking Machine Setters and Set-up Operators, Except Sawing - Set up or set up and operate woodworking machines, such as lathes, drill presses, sanders, shapers, and planing machines, to perform woodworking operations. Exclude Sawing Machine Setters and Set-up Operators.

92314 - Woodworking Machine Operators and Tenders, Except Sawing - Operate or tend woodworking machines, such as drill presses, lathes, shapers, routers, sanders, planers, and wood-nailing machines to perform woodworking operations. Exclude Sawyers.

Printing, Binding, and Related Occupations

92512 - Offset Lithographic Press Setters and Set-up Operators - Set up or set up and operate offset printing press, either sheet or web fed, to print single and multicolor copy from lithographic plates. Examine job order to determine press operating time, quantity to be printed, and stock specifications.

92524 - Screen Printing Machine Setters and Set-up Operators - Set up or set up and operate screen printing machines to print designs onto articles and materials, such as glass or plasticware, cloth, and paper.

92525 - Bindery Machine Setters and Set-up Operators - Set up or set up and operate machines that perform some or all of the following functions in order to produce books, magazines, pamphlets, catalogs, and other printed materials: gathering, folding, cutting, stitching, rounding and backing, supering, casing-in, lining, pressing, and trimming.

92541 - Typesetting and Composing Machine Operators and Tenders - Operate or tend typesetting and composing equipment, such as phototypesetters, linotype or monotype keyboard machines, photocomposers, linocasters, and photoletterers. Exclude Data Entry Keyers of computerized systems.

92543 - Printing Press Machine Operators and Tenders - Operate or tend various types of printing machines, such as offset lithographic presses, letter or letter set presses, flexographic or gravure presses, to produce print on paper or other materials such as plastic, cloth, or rubber.

92546 - Bindery Machine Operators and Tenders - Operate or tend binding machines that round, back, case, line stitch, press, fold, trim, or perform other binding operations on books and related articles. Exclude Hand Bindery Workers and Machine Feeders and Offbearers.

Textile and Related Setters, Operators, and Related Occupations

92717 - Sewing Machine Operators, Garment - Operate or tend sewing machines to perform garment sewing operations, such as joining, reinforcing, or decorating garments or garment parts. Include sewing machine operators and tenders who perform specialized or automatic sewing machine functions, such as buttonhole making or tacking.

92721 - Sewing Machine Operators, Nongarment - Operate or tend sewing machines to join together, reinforce, decorate, or perform related sewing operations in the manufacture of nongarment products, such as upholstery, draperies, linens, carpets, and mattresses.

92726 - Laundry and Dry-Cleaning Machine Operators and Tenders, Except Pressing - Operate or tend washing or dry-cleaning machines to wash or dry-clean commercial, industrial, or household articles, such as cloth garments, suede, leather, furs, blankets, draperies, fine linens, rugs, and carpets.

92728 - Pressing Machine Operators and Tenders, Textile, Garment, and Related Materials - Operate or tend pressing machines, such as hot-head pressing, steam pressing, automatic pressing, ironing, plunger pressing, and hydraulic pressing machines, to press and shape articles such as leather, fur, and cloth garments, drapes, slipcovers, handkerchiefs, and millinery. Exclude Delicate Fabric (Precision) Pressers.

Other Machine Setters, Set-Up Operators, Operators, and Tenders- Except Metal and Plastic

92905 - Motion Picture Projectionists - Set up and operate motion picture projection and sound reproduction equipment.

92908 - Photographic Processing Machine Operators and Tenders - Operate or tend photographic processing machines, such as motion picture film printing machines, photographic printing machines, film developing machines, and mounting presses, according to job specifications.

92923 - Furnace, Kiln, Oven, Drier, or Kettle Operators and Tenders - Operate or tend heating equipment other than basic metal or plastic processing equipment. Oven Operators or Tenders: Bake fiberglass or painted products, fuse glass or enamel to metal products, carbonize coal, or cure rubber or other products. Furnace Operators or Tenders: Anneal glass, roast sulfur, convert chemicals, or process petroleum. Kettle Operators and Tenders: Boil soap, or melt antimony or asphalt materials. Drier Operators and Tenders: Remove moisture from paper, chemicals, ore, clay products, or slurry. Kiln Operators and Tenders: Heat minerals, dry lumber, fire greenware, anneal glassware, or bake clay products.

92926 - Boiler Operators and Tenders, Low Pressure - Operate or tend low pressure stationary steam boilers and auxiliary steam equipment, such as pumps, compressors and air conditioning equipment, to supply steam heat for office buildings, apartment houses, or industrial establishments; to maintain steam at specified pressure aboard marine vessels; or to generate and supply compressed air for operation of pneumatic tools, hoists, and air lances.

92944 - Cutting and Slicing Machine Operators and Tenders - Operate or tend machines to cut or slice any of a wide variety of products or materials, such as tobacco, food, paper, roofing slate, glass, stone, rubber, cork, and insulating material. Exclude Metal, Wood, and Plastic Sawing Machine Operators and Tenders, and Textile Cutting Machine Operators and Tenders.

92947 - Painters, Transportation Equipment - Operate or tend painting machines to paint surfaces of transportation equipment, such as automobiles, buses, trucks, boats, and airplanes.

92953 - Coating, Painting, and Spraying Machine Operators and Tenders - Coating Machine Operators or Tenders: Operate or tend machines to coat any of a wide variety of items: Coating food products with sugar, chocolate, or butter; coat paper and paper products with chemical solutions, wax, or glazes; or coat fabric with rubber or plastic. Painting and Spraying Machine Operators and Tenders: Operate or tend machines to spray or paint decorative, protective, or other coating or finish, such as adhesive, lacquer, paint, stain, latex, preservative, oil, or other solutions. May apply coating or finish to any of a wide variety of items or materials, such as wood and wood products, ceramics, and glass. Include workers who apply coating or finish to materials preparatory to further processing or to consumer use.

92956 - Cementing and Gluing Machine Operators and Tenders - Operate or tend cementing and gluing machines to join together items to form a completed product or to form an article for further processing. Processes include: Joining veneer sheets into plywood; gluing paper to glass wool, cardboard or paper; joining rubber and rubberized fabric parts, plastic, simulated leather, and other materials.

92958 - Cleaning, Washing, and Pickling Equipment Operators and Tenders - Operate or tend machines to wash or clean items, such as barrels or kegs, glass products, tinplate surfaces, dried fruit, pulp, animal stock, coal, manufactured articles, plastic, or rubber, to remove impurities preparatory to further processing.

92962 - Separating, Filtering, Clarifying, Precipitating, and Still Machine Operators and Tenders - Operate or tend machines such as filter presses, shaker screens, centrifuges, condenser tubes, precipitator tanks, fermenting tanks, evaporating tanks, scrubbing towers and batch stills. These machines extract, sort, or separate liquids, gases, or solid materials from other materials in order to recover a refined product or material. Exclude workers who operate equipment to control chemical changes or reactions.

92965 - Crushing, Grinding, Mixing, and Blending Machine Operators and Tenders - Crushing, Grinding, and Polishing Machine Operators and Tenders: Operate or tend machines to crush or grind any of a wide variety of materials, such as coal, glass, plastic, dried fruit, grain, stone, chemicals, food, or rubber; or operate or tend machines that buff and polish materials or products, such as stone, glass, slate, plastic or metal trim, bowling balls, or eyeglasses. Mixing and Blending Machine Operators and Tenders: Operate or tend machines to mix or blend any of a wide variety of materials, such as spices, dough batter, tobacco, fruit juices, chemicals, livestock feed, food products, color pigments, or explosive ingredients.

92968 - Extruding, Forming, Pressing, and Compacting Machine Setters and Set-Up Operators - Set up or set up and operate machines, such as glass forming machines, plodder machines, and tuber machines, to manufacture any of a wide variety of products, such as soap bars, formed rubber, glassware, food, brick, and tile, by means of extruding, compressing, or compacting.

92971 - Extruding, Forming, Pressing, and Compacting Machine Operators and Tenders - Operate or tend machines to shape and form any of a wide variety of manufactured products, such as glass bulbs, molded food and candy, rubber goods, clay products, wax products, tobacco plugs, cosmetics, or paper products, by means of extruding, compressing or compacting.

92974 - Packaging and Filling Machine Operators and Tenders - Operate or tend machines, such as filling machines, casing-running machines, ham-rolling machines, preservative-filling machines, baling machines, wrapping machines, and stuffing machines, to prepare industrial or consumer products, such as gas cylinders, meat and other food products, tobacco, insulation, ammunition, stuffed toys, and athletic equipment for storage or shipment.

92998 - All Other Machine Operators and Tenders - All other machine operators and tenders not classified separately above.

Hand Working Occupations, Including Assemblers and Fabricators

Precision Assemblers

93114 - Electrical and Electronic Equipment Assemblers, Precision - Assemble or modify prototypes or final assemblies of electrical or electronic equipment, such as missile control systems, radio and test equipment, computers, numerical control machine tools, radar, sonar, telemetering systems, or appliances. Include workers who primarily assemble electrical systems for machinery.

Other Hand Workers, Including Assemblers and Fabricators

93914 - Welders and Cutters - Use hand-welding and flame-cutting equipment, such as arc welders, gas welders, and gas torches, to weld together metal components of such products as pipelines, automobiles, boilers, and ships; to join together components of fabricated sheet metal assemblies; or to cut, trim, or scarf metal objects to dimensions, as specified by layout, work orders, or blueprints.

93921 - Pressers, Hand - Press articles to remove wrinkles, flatten seams, and give shape by using hand iron. Articles pressed include: Drapes, knit goods, millinery parts, parachutes, garments, slipcovers, and textiles such as lace, rayon, and silk. May block (shape) knitted garments after cleaning. May press leather goods.

93926 - Cutters and Trimmers, Hand - Use hand tools or hand-held power tools to cut and trim a variety of manufactured items, such as stone, glass, or rubber. Exclude Portable Machine Cutters who use patterns to cut multiple layers of fabric.

93938 - Meat, Poultry, and Fish Cutters and Trimmers, Hand - Use hand tools to perform a wide variety of food cutting and trimming tasks that require skills less than that of the precision level. Include Meat Boners, Carcass Splitters, Poultry Eviscerators, Fish Cleaners and Butchers, Skinners, and Sticklers.

93941 - Metal Pourers and Casters, Basic Shapes - Operate hand-controlled mechanisms adjunctive to specialized machinery and equipment to pour and regulate the flow of molten metal into molds for producing castings or ingots of specific quality and size. Include Steel Pourers, Casters, and Ladle and Metal Pourers.

93947 - Painting, Coating, and Decorating Workers, Hand - Paint, coat, and decorate, using hand tools or hand-held power tools, a wide variety of manufactured items, such as furniture, glass and plateware, lamps, jewelry, books, or leather products. Include Inlayers, Stainers, Enamellers, and Decal Appliers.

93953 - Grinding and Polishing Workers, Hand - Grind and polish, using hand tools or hand-held power tools, a wide variety of metal, stone, clay, plastic, and glass objects or parts. Include Grinders and Chippers, Polishers and Buffers, Metal Sanders and Finishers, Glass Grinders and Polishers, and Plastic Buffers and Finishers. Exclude precision-level workers.

93956 - Assemblers and Fabricators, Except Machine, Electrical, Electronic, and Precision - Assemble or fit together parts to form complete units or subassemblies at a bench, conveyor line, or on the floor. Work may involve the use of hand tools, power tools, and special equipment in order to carry out fitting and assembly operations. Include assemblers whose duties are of a non-precision nature. Exclude electrical, electronic, machine, and precision assemblers, and workers who perform specialized operations exclusively as a part of assembly operations, such as riveting, welding, soldering, machining, or sawing.

93999 - All Other Hand Workers - All other hand workers not classified separately above.

Plant and System Occupations

95002 - Water and Liquid Waste Treatment Plant and System Operators - Operate or control an entire process or system of machines, often through the use of panelboards, control boards, or semiautomatic equipment, to transfer or treat water and/or liquid waste.

95017 - Gaugers - Gauge and test oil in storage tanks. Regulate flow of oil into pipelines at wells, tank farms, refineries, and marine and rail terminals, following prescribed standards and regulations.

95023 - Auxiliary Equipment Operators, Power - Control and maintain auxiliary equipment, such as pumps, fans, compressors, condensers, feedwater heaters, filters, and chlorinators, that supply water, fuel, lubricants, air, and auxiliary power for turbines, generators, boilers, and other power-generating plant facilities.

95028 - Power Distributors and Dispatchers - Coordinate, regulate, or distribute electricity or steam in generating stations and substations, and over electric power lines. May work for utility company or in a large industrial establishment. May spend some time generating power.

95032 - Stationary Engineers - Operate and maintain stationary engines and mechanical equipment to provide utilities for buildings or industrial processes. Operate equipment such as steam engines, generators, motors, turbines, and steam boilers.

95099 - All Other Plant and System Operators - All other plant and system operators not classified separately above.

Transportation and Material-Moving Machine and Vehicle Operators
Motor Vehicle Operators

97102 - Truck Drivers, Heavy or Tractor-Trailer - Drive a tractor-trailer combination or a truck with a capacity of at least 3 tons, to transport and deliver goods, livestock, or materials in liquid, loose or packaged form. May be required to unload truck.

97105 - Truck Drivers, Light, Include Delivery and Route Workers - Drive a truck, van, or automobile with a capacity under 3 tons. May drive light truck to deliver or pick up merchandise. May load and unload truck.

97108 - Bus Drivers, Except School - Drive bus, transporting passengers over specified routes to local or distant points according to a time schedule. Assist passengers with baggage. Collect tickets or cash fares.

97111 - Bus Drivers, School - Transport students between pickup points and school. Maintain order during trip and adhere to safety rules when loading and unloading pupils.

97114 - Taxi Drivers and Chauffeurs - Drive automobiles, limousines, custom-built sedans, or hearses to transport passengers or cargo. May drive automobiles for delivery. Exclude Ambulance Drivers and Bus Drivers.

97117 - Driver/Sales Workers - Drive truck or other vehicle over established routes to: Deliver and sell goods, such as food products; pick up and deliver items, such as laundry; or refill and collect coins from vending machines. Include Newspaper Delivery Drivers.

97199 - All Other Motor Vehicle Operators - All other motor vehicle operators not classified separately above.

Rail Transportation Occupations

97305 - Locomotive Engineers - Drive electric, diesel-electric, steam, or gas-turbine-electric locomotives to transport passengers or freight. Interpret train orders, block or semaphore signals, and railroad rules and regulations.

97308 - Rail Yard Engineers, Dinkey Operators, and Hostlers - Drive switching or other locomotive or dinkey engines within railroad yard, industrial plant, quarry, construction project, or similar location.

Air Transportation Occupations

97702 - Aircraft Pilots and Flight Engineers - Pilot and navigate flight of private or commercial aircraft for the transportation of passengers, freight, mail, or for other purposes. Must be federally licensed. Include workers concerned with flight operations and maintenance when a pilot's or flight engineer's license is required. Include Test Pilots, Helicopter Pilots, and pilots who accompany other pilots to periodically test and review proficiency.

Other Transportation and Related Occupations

97805 - Service Station Attendants - Service automobiles, buses, trucks, boats, and other automotive or marine vehicles with fuel, lubricants, and accessories. Collect payment for services and supplies. May lubricate vehicle, change motor oil, install antifreeze, or replace lights or other accessories such as windshield wiper blades or fan belts. May repair or replace tires.

97808 - Parking Lot Attendants - Park autos or issue tickets for customers in a parking lot or garage.

97899 - All Other Transportation and Related Workers - All other transportation and related workers not classified separately above.

Material Moving Equipment Operators

97911 - Wellhead Pumpers - Operate power pumps and auxiliary equipment to produce artificial flow of oil or gas from wells in oil field.

97921 - Gas Compressor Operators - Operate steam or internal combustion engines to transmit, compress, or recover gases, such as butane, nitrogen, hydrogen, and natural gas, in various production processes.

97923 - Excavating and Loading Machine Operators - Operate or tend machinery equipped with scoops, shovels, or buckets, to excavate and load loose materials. Exclude Dredge and Dragline Operators.

97926 - Dragline Operators - Operate power-driven crane equipment with dragline bucket to excavate or move sand, gravel, mud, or other materials.

97938 - Grader, Bulldozer, and Scraper Operators - Operate machine or vehicle equipped with blades to remove, distribute, level, or grade earth. Exclude Paving, Surfacing, and Tamping Equipment Operators.

97944 - Crane and Tower Operators - Operate mechanical boom and cable or tower and cable equipment to lift and move materials, machines, or products in many directions. Exclude Dragline Operators.

97947 - Industrial Truck and Tractor Operators - Operate gasoline or electric-powered industrial trucks or tractors equipped with forklift, elevated platform, or trailer hitch to move materials around a warehouse, storage yard, factory, construction site, or similar location. Exclude Logging Tractor Operators.

97951 - Conveyor Operators and Tenders - Control or tend conveyors or conveyor systems that move materials or products to and from stockpiles, processing stations, departments, vehicles, and underground workings. May control speed and routing of materials or products.

97953 - Pump Operators - Tend, control, or operate power-driven, stationary, or portable pumps and manifold systems, to transfer gases, liquids, slurries, or powdered materials to and from various vessels and processes.

97956 - Operating Engineers - Operate several types of power construction equipment, such as compressors, pumps, hoists, derricks, cranes, shovels, tractors, scrapers, or motor graders to excavate, move and grade earth, erect structures, or pour concrete or other hard surface pavement. May repair and maintain equip-

ment in addition to other duties. Exclude workers who specialize in operation of a single type of heavy equipment, such as a bulldozer or crane.

97989 - All Other Material-Moving Equipment Operators - All other material-moving equipment operators not classified separately above.

97999 - All Other Transportation and Material-Moving Equipment Operators - All other transportation and material-moving equipment operators not classified separately above.

Helpers, Laborers, and Material Movers, Hand - Except Agriculture and Forestry Laborers

Helpers - Mechanics and Repairers

98102 - Helpers, Mechanics and Repairers - Help mechanics and repairers in maintenance, parts replacement, and repair of vehicles, industrial machinery, and electrical and electronic equipment. Perform duties such as furnishing tools, materials, and supplies to other workers; cleaning work area, machines, and tools; and holding materials or tools for other workers.

Helpers - Construction Trades and Extractive Workers

98311 - Helpers, Brick and Stonemasons and Hard Tile Setters - Help Brickmasons, Stonemasons, or Hard Tile Setters by performing duties of lesser skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment. Exclude apprentice workers and report them with the appropriate construction or maintenance trade occupation. Exclude construction or maintenance laborers who do not primarily assist Brickmasons, Stonemasons, or Hard Tile Setters.

98312 - Helpers, Carpenters and Related Workers - Help Carpenters or carpentry-related craft workers by performing duties of lesser skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment. Exclude apprentice workers and report them with the appropriate construction or maintenance trade occupation. Exclude construction or maintenance laborers who do not primarily assist Carpenters or carpentry-related craft workers.

98313 - Helpers, Electricians and Power-Line Transmission Installers - Help Electricians or Power-line Transmission Installers by performing duties of lesser skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment. Exclude apprentice workers and report them with the appropriate construction or maintenance trade occupation. Exclude construction or maintenance laborers who do not primarily assist Electricians or Power-line Transmission Installers.

98314 - Helpers, Painters, Paperhangers, Plasterers, and Stucco Masons - Help Painters, Paperhangers, Plasterers, or Stucco Masons by performing duties of lesser skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment. Exclude apprentice workers and report them with the appropriate construction or maintenance trade occupation. Exclude construction or maintenance laborers who do not primarily assist Painters, Paperhangers, Plasterers, or Stucco Masons.

98315 - Helpers, Plumbers, Pipefitters, and Steamfitters - Help Plumbers, Pipefitters, or Steamfitters by performing duties of lesser skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment. Exclude apprentice workers and report them with the appropriate construction or maintenance trade occupation. Exclude construction or maintenance laborers who do not primarily assist Plumbers, Pipefitters, or Steamfitters.

98316 - Helpers, Roofers - Help Roofers by performing duties of lesser skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment. Exclude apprentice workers and report them with the appropriate construction or maintenance trade occupation. Exclude construction or maintenance laborers who do not primarily assist Roofers.

98319 - Helpers, All Other Construction Trades Workers - All other construction trades helpers not classified separately above.

98323 - Helpers, Extractive Workers - Help extractive craft workers, such as Earth Drillers, Blasters and Explosives Workers, Derrick Operators, and Mining Machine Operators, by performing duties of lesser skill. Duties include supplying equipment or cleaning work area. Exclude apprentice workers and report them with the appropriate construction or maintenance trade occupation. Exclude laborers who do not primarily assist extractive craft workers.

Machine Feeders and Offbearers

98502 - Machine Feeders and Offbearers - Feed materials into or remove materials from machines or equipment that is automatic or tended by other workers.

Freight, Stock, and Material Movers, Hand

98705 - Refuse and Recyclable Material Collectors - Collect refuse or recyclable materials from containers and put into truck, on a designated route.

98799 - All Other Freight, Stock, and Material Movers, Hand - All other freight, stock, and material movers, hand, not classified separately above.

Other Helpers, Laborers, and Material Movers, Hand

98902 - Hand Packers and Packagers - Pack or package by hand a wide variety of products and materials. Exclude workers whose jobs require more than minimum training.

98905 - Vehicle Washers and Equipment Cleaners - Wash or otherwise clean vehicles, machinery, and other equipment. Use such materials as water, cleaning agents, brushes, cloths, and hoses. Exclude Janitors and Building Cleaners.

98999 - All Other Helpers, Laborers, and Material Movers, Hand - All other helpers, laborers, and material movers, hand, not classified separately above.

Montana Job Service Workforce Center Locations

ANACONDA

307 East Park
Anaconda MT 59711
(406-563-3444)

BILLINGS

2121-B Rosebud Dr.
Billings MT 59102
(406-652-3080)

BOZEMAN

121 N. Willson
Bozeman MT 59715
(406-582-9200)

BUTTE

2201 White Blvd.
P.O. Box 3528
Butte MT 59702
(406-494-0300)

CUT BANK

1210 E. Main
Cut Bank MT 59427
(406-873-2191)

DILLON

730 N. Montana
P.O. Box 1300
Dillon MT 59725
(406-683-4259)

GLASGOW

238 2nd Ave. S.
Glasgow MT 59230
(406-228-9369)

GLENDAVE

211 S. Kendrick
Glendive MT 59330
(406-365-3314)

GREAT FALLS

1018 7th St. S.
Great Falls MT 59405
(406-791-5800)

HAMILTON

333 W. Main St.
Hamilton MT 59840
(406-363-1822)

HAVRE

160 1st Ave.
Havre MT 59501
(406-265-5847)

HELENA

715 Front Street
P.O. Box 201505
Helena MT 59620-1505
(406-447-3200)

KALISPELL

427 1st Ave. E.
Kalispell MT 59901
(406-758-6200)

LEWISTOWN

300 1st Ave. N.
Lewistown MT 59457
(406-538-8701)

LIBBY

417 Mineral Ave./Suite 4
Libby MT 59923
(406-293-6282)

LIVINGSTON

228 S. Main
P.O. Box 1199
Livingston MT 59047
(406-222-0520)

MILES CITY

12 N. 10th St.
P.O. Box 1786
Miles City MT 59301
(406-232-8340)

MISSOULA

539 S. 3rd St. W.
P.O. Box 5027
Missoula MT 59806
(406-728-7060)

POLSON

417-B Main St.
P.O. Box 970
Polson MT 59860
(406-883-5261)

SHELBY

402 1st St. S.
Shelby MT 59474
(406-434-5161)

SIDNEY

211 N. Central
Sidney MT 59270
(406-482-1204)

THOMPSON FALLS

608 Main St.
P.O. Box 669
Thompson Falls MT 59873
(406-827-3472)

WOLF POINT

217 3rd Ave. S.
Wolf Point MT 59201
(406-653-1720)

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